REVISED REPORT OF REMEDIAL INVESTIGATION FINDINGS L.E. CARPENTER & COMPANY WHARTON, NEW JERSEY SITE VOLUME II DATA TABLES

June 1990

Prepared for

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VOLUME II

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TABLE 1

RAW MATERIALS INVENTORY AS OF JUNE 22, 1987 AND MAY 30, 1990

Naptha	m m m m g 12 g 12 g 12 g 12 g 12 g 12 g 14	Tank #1 (15000) Tank #2 (15000) Tank #3 (15000) Tank #4 (15000) Tank #5 (3000) Tank #6 (3000) Tank #7 (10000) Tank Tank Tank Tank E-1 (10000) Tank E-2 (30000) Tank E-3 (10000)	170 270 230 110 100 0 20	00 gallons	empty empty empty empty empty empty empty zo gallons rainwates	-
Waste Xylene	m m m g 12 g 14 g 14	Tank #2 (15000) Tank #3 (15000) Tank #4 (15000) Tank #5 (3000) Tank #6 (3000) Tank #7 (10000) Tank Tank Tank Tank E-1 (10000) Tank E-2 (30000) Tank E-3 (10000)	170 270 230 110 100 0 20	O gallons OO gallons	empty empty empty empty empty empty 20 gallon: rainwate:	
Xylene	m m m g 12 g 13 g 14 g 1	Tank #3 (15000) Tank #4 (15000) Tank #5 (3000) Tank #6 (3000) Tank #7 (10000) Tank Tank Tank E-1 (10000) Tank E-2 (30000) Tank E-3 (10000) Tank E-4 (10000)	170 270 230 110 100 0 20	00 gallons 00 gallons 00 gallons 00 gallons 00 gallons 00 gallons	empty empty empty empty 20 gallons rainwates	-
Tank Far Sancticizer 160** Tank Far Epoxidized Soy Bean Oil Tank Far Epoxidized Soy Bean Oil Tank Far Boiler Blowdown Water adjacent bldg Propane adjacent bldg West of bldg We	m m g 12 g 13 & g g 14 g	Tank #4 (15000) Tank #5 (3000) Tank #6 (3000) Tank #7 (10000) Tank Tank Tank E-1 (10000) Tank E-2 (30000) Tank E-3 (10000) Tank E-4 (10000)	270 230 110 100 0 20 0	00 gallons 00 gallons 00 gallons 00 gallons 00 gallons	empty empty empty 20 gallons rainwates	-
Sancticizer 160**	m g 12 g 13 g 14	Tank #5 (3000) Tank #6 (3000) Tank #7 (10000) Tank Tank Tank E-1 (10000) Tank E-2 (30000) Tank E-3 (10000)	230 110 100 0 20 0	00 gallons 00 gallons 00 gallons 0 gallons 00 gallons	empty empty 20 gallons	-
Epoxidized Soy Bean Oil	g 12 g 13 g 14 g	Tank #6 (3000) Tank #7 (10000) Tank Tank Tank E-1 (10000) Tank E-2 (30000) Tank E-3 (10000) Tank E-4 (10000)	110 100 0 20 0	00 gallons 00 gallons 0 gallons 00 gallons	empty 20 gallons rainwates	
Boiler Blowdown Water	g 12 g 13 g 14 g	Tank #7 (10000) Tank Tank Tank E-1 (10000) Tank E-2 (30000) Tank E-3 (10000) Tank E-4 (10000)	100 0 20 0	00 gallons 0 gallons 00 gallons	20 gallon: rainwate:	
Propane	g 12 g 12 g 12 g 12 g, 9 g, 9 g, 9 g & 9	Tank Tank Tank E-1 (10000) Tank E-2 (30000) Tank E-3 (10000) Tank E-4 (10000)	20 20 0	gallons Ogallons	rainwate:	
No. 6 Fuel 0il	g 12 g 12 g. 9 g. 9 g. 9 g. 8 9	Tank E-1 (10000) Tank E-2 (30000) Tank E-3 (10000) Tank E-4 (10000)	20 0 150	00 gallons		• !
No. 6 Fuel 0il] 12]. 9]. 9] & 9	Tank E-2 (30000) Tank E-3 (10000) Tank E-4 (10000)	150			
Waste MEK and Pigments west of bldg Methyl ethyl ketone (MEK) west of bldg Smog Hog Condensate * east of bldg ea	g. 9 g. 9 g. 8 g. 14	Tank E-2 (30000) Tank E-3 (10000) Tank E-4 (10000)	150	3	10000	- !
Waste MEK and Pigments west of bldg Methyl ethyl ketone (MEK) west of bldg Smog Hog Condensate * east of bldg Smog Hog Condensate * east of bldg Smog Hog Condensate * east of bldg Smog Hog Condensate * between bldg East of bldg Smog Hog Condensate * between bldg East of bld	g. 9 g. 9 g. 8 g. 14] Tank E-3 (10000) Tank E-4 (10000)		000 gallons		- !
Methyl ethyl ketone (MEK) west of bldg Smog Hog Condensate * east of bldg east of bldg]. 9 3 & 9 3 14	Tank E-4 (10000)	,	00 gallons	6000	ı,
Smog Hog Condensate * between bldg & Smog Hog Condensate * east of bldg & Smog Hog Condensate * between bldg & smog Hog Condensate * between bldg & Diesel Oil adjacent bldg & adjacent bldg & linside bldg	3 & 9 3 14	• • •	1 190	00 gallons	500	1
Smog Hog Condensate * east of bldg Smog Hog Condensate * between bldg Diesel Oil adjacent bldg Fragrance inside bldg Sancticizer 141*** inside bldg PVC Resin (Dispersion) inside bldg PVC Resin (Blending) inside bldg Magnesium hydroxide inside bldg Stabilizers (Ba,Cd,Zn) inside bldg Stabilizers (Ba,Cd,Zn) inside bldg Calcium Carbide inside bldg Antimony Oxide inside bldg Zinc borate inside bldg Titanium dioxide inside bldg		Tank E-5 (550)		gallons	550	- [
Smog Hog Condensate * between bldg & Diesel Oil adjacent bldg Fragrance inside bldg Sancticizer 141*** inside bldg PVC Resin (Dispersion) inside bldg PVC Resin (Blending) inside bldg inside bldg Stabilizers (Ba,Cd,Zn) inside bldg Stabilizers (Ba,Cd,Zn) inside bldg Wetting Agent inside bldg Calcium Carbide inside bldg Antimony Oxide inside bldg Zinc borate inside bldg Titanium dioxide inside bldg Inside bldg Titanium dioxide Inside bldg Insi	1 14	Tank E-6 (550)	-	gallons	550	,
Diesel Oil adjacent bldg Fragrance inside bldg Sancticizer 141*** inside bldg PVC Resin (Dispersion) inside bldg PVC Resin (Blending) inside bldg inside bldg Stabilizers (Ba,Cd,Zn) inside bldg Stabilizers (Ba,Cd,Zn) inside bldg Wetting Agent inside bldg Calcium Carbide inside bldg Antimony Oxide inside bldg Zinc borate inside bldg Titanium dioxide inside bldg Inside b		Tank E-7 (550)	-	gallons	550 550	!
Fragrance	49	Tank E-8 (550)		gallons	550	- !
Fragrance inside bldg. Sancticizer 141*** inside bldg. PVC Resin (Dispersion) inside bldg. PVC Resin (Blending) inside bldg.	12	Tank E-9 (550)	Ī.,	0 gallons	400	!
PVC Resin (Dispersion) inside bldg. PVC Resin (Blending) inside bldg. Magnesium hydroxide inside bldg. Stabilizers (Ba,Cd,Zn) inside bldg. Wetting Agent inside bldg. Calcium Carbide inside bldg. Antimony Oxide inside bldg. Zinc borate inside bldg. Titanium dioxide inside bldg.	•	i drum	-	unknown	9500	
PVC Resin (Blending) inside bldg. Magnesium hydroxide inside bldg. Stabilizers (Ba,Cd,Zn) inside bldg. Wetting Agent inside bldg. Calcium Carbide inside bldg. Antimony Oxide inside bldg. Zinc borate inside bldg. Titanium dioxide inside bldg.	13 j	l drum	-	0 gallons	removed	- !
Magnesium hydroxide inside bldg. Stabilizers (Ba,Cd,Zn) inside bldg. Wetting Agent inside bldg. Calcium Carbide inside bldg. Antimony Oxide inside bldg. Zinc borate inside bldg. Titanium dioxide inside bldg.	13	bags	-	000 lbs.	removed	!
Stabilizers (Ba,Cd,Zn) inside bldg. Wetting Agent inside bldg. Calcium Carbide inside bldg. Antimony Oxide inside bldg. Zinc borate inside bldg. Titanium dioxide inside bldg.	13 į	bags	•	000 155. 000 15s.	removed	!
Stabilizers (Ba,Cd,Zn) inside bldg. Wetting Agent inside bldg. Calcium Carbide inside bldg. Antimony Oxide inside bldg. Zinc borate inside bldg. Titanium dioxide inside bldg.	13	bags	•	000 lbs.	removed	!
Calcium Carbide inside bldg. Antimony Oxide inside bldg. Zinc borate inside bldg. Titanium dioxide inside bldg.	•	begs	•	O gallons	removed	!
Antimony Oxide inside bldg. Zinc borate inside bldg. Titanium dioxide inside bldg.	13	bags		00 lbs.	removed	!
Zinc borate inside bldg. Titanium dioxide inside bldg.	13 j	bags	•	000 lbs.	removed	
Titanium dioxide inside bldg.	13	bags	•	100 lbs.	removed	
1 Indade bing.	13	bags	•	50 lbs.	removed	
Celogen OT (blowing agent) inside bldg.	13	bags	•	000 lbs. 1	removed	!
	13 i	bags	•	50 lbs.		!
ABF-2 inside bldg.	•	drum		gallons	removed	
Irogel 900 inside bldg.	•	drum		gallons	removed	!
Methyl isobutyl ketone (MIBK) NW loading dock		drum	-	gallons (removed	!
Cyclohexanol NW loading dock		drum	•	gallons !	removed	
Toluene NW loading dock		drum	•	gallons	removed	ļ
Clear Print Finishes inside Bldg.		50 drums	-	•	removed	- 1
Black ink inside Bldg.	•	3 pails	-	000 lbs.	removed	ı
Phthalo blue ink inside Bldg.	•	3 pails	•	gallons	removed	
Orange ink inside Bldg.	•	3 pails	-	gallons	removed	1
Red oxide ink inside Bldg.	•	4 pails		gallons	removed	!
Monastral red ink inside Bldg.		•		gallons	removed	ı
Yellow ink inside Bldg.	•	ll pails 7 pails		gallons	removed	1
Indo yellow ink inside Bldg.	•	7 pails		gallons	removed	İ
Gold ink inside Bldg.	9 1	•		gallons	removed .	ı
Pearl ink (80% MIBK) inside Bldg.	•	2 pails		gallons	removed	ł
Silver Sparkly ink inside Bldg.	9 j	5 pails [gallons	removed	1
Isophrone inside Bldg.	9	1 drum		gallons !	removed	1
discellaneous inks inside Bldg.	9 9 9	1 drum	55 g	gallons	removed	

NOTES: Underground tanks are denoted with an "E" prefix

 ⁻ As of 5/30/90 the Smog Hog Tanks were full of water. Originally these tanks collected plasticizer fumes, primarily di-octyl phthalate.

⁻ S-160 is butyl benzyl phthalate

^{*** -} S-141 is ethyl hexyl diphenyl phosphate

TABLE 2

SUMMARY OF ANALYTICAL PARAMETERS - SOIL SAMPLES - TEST PITS

1027WG.FM 6/25/90

	1		ANA	LYTICAL PARA			
	1 ! V0+15			PP Metals	PCBs	Fingerprint (SBO)	PP+40
********	222222222	=========	********	========	========	=======================================	=======
Test Pit	Ι.,	1	1	1	1	İ	
Sample #	1	1	f	1	1	l i	ľ
	1	I	1	f	1 1		i
TP-1A	I X	I X	1	r X	1 X 1	1	1
TP-1B	i X	I X	1	1 X	1 X 1	١	
TP-2A	i X	I X	1	I X	I X I		
TP-2B	t X	1 X	i I	i X i	ו 🗶 ו	· I	
TP-3A	I X	1 X	1	I X I	I X I	i	
TP-3B	I X	I X	I	X	l X I	J	
TP-4A	I X	I X	I (l X :	l X i	ı	
TP-4B	i X	I X	; (1 X 1	ı X ı	1	
TP-5A	i x	1 X	!	ı X ı	l X 1	· i	
TP-5B	l X	l X	!	I X 1	ı X i	i	
TP-6A	I X	1 X	! (1 X 1	1 X 1	i	
TP-6B	I X	l X	l i	X	XI	i	
TP-7A	I X	l X	1	X	X i	ï	
TP-7B	i X	I X	1 1	 X	XI	,	
TP-8A	I X	l X	I i	X	X		
TP-8B	1 X	1 X	1 i	X		·	
TP-9A	l X	ı X	i i	X	, I X I	i	
TP-9B	I X	I X	İ	i X i	X i	,	
TP-10	ł X	1 X	1 i				
TP-11	I X	i X	l i			i	
TP-12	F X	1 X	ı	1	i	i	
TP-13	ł X	ł X	l i		i	i	
TP-14	l X	t X	1 1		i		
TP-15	1 X	l X	ı			,	
TP-16	1 X	1 X	1	 	1	! :	
TP-17	i x		-			1	
TP-18	i X	 I X I		,	,	[
TP-19	i ŝ	Î			i 1	!	
TP-20	-	 ! X 1	, , , ,	,	1	!	
TP-21				Į.		ı	
TP-22	I X	1 X (!	į	İ	
TP-23	' A		!	!	į	!	
TP-24	I X		i .	1	1	t	
1P-24 TP-25	· ·	1 X (r 1	!	1	1	
TP-26	• ••			1	ı	1	
	X ====================================		•	1	1	1	

NOTES: X - Specified test pit sample analyzed for indicated parameter.

VO+15 - Volatile Organics by EPA Method 8240 plus fifteen non-targeted compounds.

BN+15 - Base Neutral Organics by EPA Method 8270 plus fifteen non-targeted compounds.

TPH - Total Petroleum Hydrocarbons by EPA Method 418.1.

PP Metals - Priority pollutant metals by EPA 200 series or comparable ICP EPA Methods.

Pesticides/PCBs - Pesticides and polychlorinated biphenyls (PCBs) by EPA Method 8080.

Fingerprint (SBO) - Hydrocarbon Fingerprint by GC/FID using modified ASTM Method D3328

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PP+40 - Priority Pollutants plus fourty additional compounds includes; volatiles by EPA Method 8240, Base Neutrals and Acid Extractable Organics by EPA Method 8270, Organochloride Pesticides and PCBs by EPA Method 8080, Priority Pollutant Metals plus Cyanide and Phenol.

	l		ANAI	LYTICAL PARAI	METERS		
	!				Pesticides/	Fingerprint	
	VO+15			PP Metals			PP+40
	========	: ========	========	=========	**********	========	======
Test Pit	1	1	1	1	!	Ī	!
Sample #	1	1	1	!	!		l
TP-27	' X	, 1 X	1] [! !
TP-28	l X	I X	1	ı		· 	
TP-29	1 X	I X	1			' !	, I
TP-30	1	1	İ	i		, X	! }
TP-31	I	1	1	•		X	! I
TP-32	1	İ	i	1		X i	!
TP-33	I X	1	· 		· 	. X	,
TP-34	1	I X	1 1	,		X	1
TP-35	i	l X	X			A 1	
TP-36	i	ï				1	
TP-37	I	i X				' X !	
TP-38	1	X	' X 1				
TP-39	I X	i X	'				
TP-40		ı X	'		· •		
TP-41	! !	1 X	ı aı				
TP-42	i X	I X	,			J	
TP-43	, A I X	1 %				l	
TP-44	, , I X	' X	' '			l l	
TP-45			NOT SAMPLED	,	,	i	
TP-46	l X	ı X	I SAMPLED	' •••••••			•••••
TP-47		i X	· ,	,	' I	1	
TP-48	-	i ŝ	, 	X i	i	1	
TP-49	۱	••••••	NOT SAMPLED			•	
TP-50A	l	I	1 1	ı	1	1	X
TP-50B	l	1 .	j i	i	ì	i	X
TP-51A	!	l I	I I	i	,	•	X
TP-51B	1	1	i i	i	,		Ŷ
TP-52	•	1	i i	i	i		Ŷ
TP-53	}	1	l t				X
TP-54 I		l i	i i	i	i	i	X
TP-55	X	i x i	i	ì	i	i	A
TP-56	X	l X i	i i	i	i	į	
TP-57 I	X	i X i	i	i	1	;	
TP-58 1	X	ı X	i	i	:		

BOTES: X - Specified test pit sample analyzed for indicated parameter.

VO-15 - Volatile Organics by EPA Method 8240 plus fifteen non-targeted compounds.

BN-15 - Base Neutral Organics by EPA Method 8270 plus fifteen non-targeted compounds.

TPH - Total Petroleum Hydrocarbons by EPA Method 418.1.

PP Hetals - Priority pollutant metals by EPA 200 series or comparable ICP EPA Methods.

Pesticides/PCBs - Pesticides and polychlorinated biphenyls (PCBs) by EPA Method 8080.

Fingerprint (SBO) - Hydrocarbon Fingerprint by GC/FID using modified ASTM Method D3328

searching for soybean oil.

PP+40 - Priority Pollutants plus fourty additional compounds includes; volatiles by EPA Method 8240, Base Neutrals and Acid Extractable Organics by EPA Method 8270, Organochloride Pesticides and PCBs by EPA Method 8080, Priority Pollutant Metals plus Cyanide and Phenol.

i		====			20000:		220220000		======		H2885288888		
ı		1	!						CAL PARA			######################################	:25 2922988
١		1									Pesticides/	Fingerprint	
ı		ı	V0+15	•	BN+15	•	TPH		Metals		PCBs	J (SBO)	I PP+40
1		===	336202co	====	29ER555	=== =	=======	===		= ==	*********		
1	Test Pi	t ļ		- 1		I				1		İ	i
!	Sample	#		ı		- 1				1		l	I
!	TP-59	ا .		- !		1				1		l	
!		!	X	j	х	1				I		1	1
!	TP-60	J	X	l	х	ı	1			1		l	l
!	TP-61	- 1	х	J	X	!	!			ı	1	}	i I
!	TP-62	i	X	ı	Х	- 1	1			l	1		1
ı	TP-63	İ	Х	1	Х	1	1		X	1			I
I	TP-64	ı	X	1	X	1	i		X	ı	İ		· !
ı	TP-65	1	X	ı	X	1	1		X	ı	i		
ı	TP-66	ļ	Х	1	X	1	- · I		X	i	i		
1	TP-67	1	X	ł	X	1	1		X	i	i		
ı	TP-68	ĺ	X	- 1	X	1	ı		X	İ	ì		
ı	TP-69	- 1	х	ı	X	ı	1		X	İ	x i		
ı	TP-70	- 1	X	1	X	1	1		X	İ	x i	ï	
ļ	TP-71	1	X	ļ	x	1	i		x	ŀ	X	ľ	
I	TP-72	- 1	Х	1	x	I	İ		X	İ	X	'	
l	TP-73	- 1	X	ı	x	ı	i		X	I	X 1		
I	TP-74	- 1	X	1	x	Ì	i		X	i	. I		
i	TP-75	1	x	1	x	Ì	i		X	i			
ı	TP-76	1	x	1		i	i		1	i I		ļ	
ſ	TP-77	1	х	i	x	i	1			, I	, , , , , , , , , , , , , , , , , , ,	I.	
ſ	TP-78	1	x	i	×	i	,				(
ŀ	TP-79	ı	x	i	х	i	í		i		!	l •	
ļ =		-					! ====================================					 	

X - Specified test pit sample analyzed for indicated parameter. NOTES:

VO+15 - Volatile Organics by EPA Method 8240 plus fifteen non-targeted compounds.

BN+15 - Base Neutral Organics by EPA Method 8270 plus fifteen non-targeted compounds.

TPH - Total Petroleum Hydrocarbons by EPA Method 418.1.

PP Metals - Priority pollutant metals by EPA 200 series or comparable ICP EPA Methods.

Pesticides/PCBs - Pesticides and polychlorinated biphenyls (PCBs) by EPA Method 8080.

Fingerprint (SBO) - Hydrocarbon Fingerprint by GC/FID using modified ASTM Method D3328

searching for soybean oil.

PP+40 - Priority Pollutants plus forty additional compounds includes; volatiles by EPA Method 8240, Base Neutrals and Acid Extractable Organics by EPA Method 8270, Organochloride Pesticides and PCBs by EPA Method 8080, Priority Pollutant Metals plus Cyanide and Phenol.

TABLE 3

SUMMARY OF ANALYTICAL PARAMETERS - SOIL SAMPLES - HAND AUGER

1027WG.FM

		1					ANALYTIC	AL PAR	AMETERS		
		ı								Pesticides/	Fingerprint
		ı	VO+15	- 1	BN+15	1	TPH	I PP	Metals	PCB's	(SBO)
===	========	==:		:= =:	======	= =:		== ===	=======	**********	=======================================
Ha	nd Auger	ı		1		1		1	į	l I	
S	ample #	1		1		1		1	1	l i	Ī
		ı		1		1		1	(}
	HA-1	ı	X	1	X	ı	X	1			ı X
	HA-2	l	X	1	X	1		1	X 1	1]
	HA-3	!	X	1	X	ı		1	X		1
	HA-4	1	X	ı	X	ı		1	X		1
	HA-5	1	X	ı	X	ı		1	X	·	Ì
	HA-6	[X	ı	X	1		ı	X	! !	1
	HA-7	ļ	X	ı	X	ł		1	X		
	HA-8	!	X	- 1	X	i		ŀ	X (Ī
	HA-9	!	X	1		ı		1	1		i
	HA-10	!	X	1		1		ı	l		1
	HA-11	!	X	ļ		1		ı	1	!	Ì
	HA-12	!	X	!		1		ı	1		
	HA-13	Ì	X	ŀ		1		I	l	! !	!
	HA-14	!	X	!		ı		ı	1	1	
	HA-15	i	X	1		ı		ı	l	1	!
	HA-16	ı	X	ı	X	ŀ		Į	X I	(
	HA-17	1	X	1	X	ı		1	X 1	1	
	HA-18	1	X	ŀ	X	1		1	X I	1	
	HA-19	1	X	Į	X	1		ı	X I	1	
	HA-20	I		1		1		l	I	X i	
	HA-21	I		I		1		1	ı	X I	
	HA-22	t		-		1		1	1	X !	
	HA-23	I		l		1	X	1	I	(
	HA-24	ł		ŀ		1	X	ı	1	1	
	HA-25	1		1		1	X	i	ı		

NOTES: X - Specified hand auger sample analyzed for indicated parameter.

VO+15 - Volatile Organics by EPA Method 8240 plus fifteen non-targeted compounds.

BN+15 - Base Neutral Organics by EPA Method 8270 plus fifteen non-targeted compounds,

TPH - Total Petroleum Hydrocarbons by EPA Method 418.1.

PP Metals - Priority pollutant metals by EPA 200 series or comparable ICP EPA Methods.

Pesticides/PCBS - Priority Pollutant Organochloride Pesticides and Polychlorinated Biphenyls (PCBs) by EPA Method 8080.

Fingerprint (SBO) - Hydrocarbon fingerprinting by GC/FID using modified ASTM Method D3328 search for soybean oil.

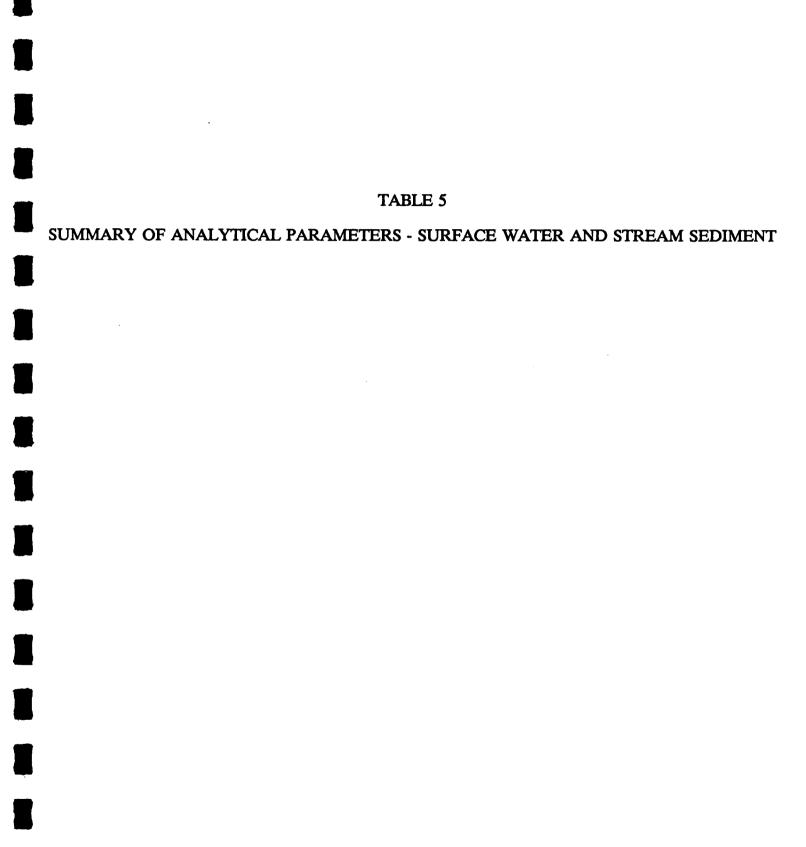
TABLE 4 SUMMARY OF ANALYTICAL PARAMETERS - GROUNDWATER

1	FIRST ROUND: Sep	otember/October 1989 TPH/	SECOND ROUND	January 1990 TPH/
Ì	PP+40	Fingerprint	PP+40	Fingerprint
•		2000001		.cs 200022222222
Groundwater		1 1		I
Sample #		1 1		I
!				1
MW-1	X		X	I
MW-2 [X		X	I
MW-3 [X	! !	X	1
MW - 4	X	† I	X	F
MW-5	X	1 1	X .	1
MW-6		1 1	, X	I
MW-7		1	X	1
MW-8	X	1	x	1
MW-9		1 1	X	1
MW-10		1	X	1
MW-11s		1 X I		j X
MW-111	X	1 1	X	1
MW-11d	X	1	X	1
MW-12s	X	1 X I	X	i .
MW-121	X	1	x	1
MW-13s	x	1 1	x	1
MW-131	X	1	X	1
MW-14s	X	1	x	1
MW-141	X	1 1	X	1
MW-14d	x	1	x	1
MW-15s	×	1	X	l .
MW-151	X	12	X	ı
MW-16s	×	1	X	1
MW-161	X	1	X	l l
MW-17s	X	i i	X	İ
MW-17d	x	i i	x	i
MW-18s	X	i	X	i
MW-181	X	· '	X	i
MW-18d	X	i	 X	i
PW-1	×	;	X	•

NOTES: X - Specified sample analyzed for indicated parameter.

> PP+40 - Priority Pollutants plus forty additional compounds includes: volatiles by EPA Method 624, Base Neutrals and Acid Extractable Organics by EPA Method 625, Organochloride Pesticides and PCBs by EPA Method 8080, Priority Pollutant Metals plus Cyanide and Phenol. Volatiles analysis also targeted additional compounds: Butyl Benzene; Cumene; Decane; Heptane; Mesitylene; 1,2,4-Trimethyl Benzene; 1,2,3-Trimethyl Benzene; 1-Ethyl, 3-Methyl Benzene; 1,2,3,4-Tetramethyl Benzene; 1,2,3,5-Tetramethyl Benzene; 1,2-Diethyl Benzene; Nonane; Styrene; p-Xylene; m-Xylene; o-Xylene and Methyl Ethyl Ketone.

Fingerprinting - Hydrocarbon fingerprinting by GC/FID using modified ASTM Method D3328.



6/25/90

1027WG.FM

TABLE 5: SUMMARY OF ANALYTICAL PARAMETERS - SURFACE WATER, STREAM SEDIMENT L.E. CARPENTER, WHARTON, NEW JERSEY.

	!		ANA	LYTICAL	PAR	AMETERS		
	1 V	0+15	j Bi	N+15	PP	Metals	† 1	PCBs
	====	*****					====	*****
Surface Water	1		i	1			1	
Sample #	1		1	1			1	
	1		I	1	ļ		ı	
5W-1	1	X	I	x [X	I	
SW-2	ı	x	ł	X		X	l	
SW-3	I	X	I	X [Х	l	
SW-4	1	X	i	X (X	l	X
SW-5	1	X	ı	x [x	I	
SW-6	1	X	l	X [X	1	
	1		1	1			1	
	ŀ		1	ĺ			1	
Stream Sediment	ı		1	ı			ı	
Sample #	1		I	ĺ			1	
	ı		ı				l	
SS-1	ı	X	l	X i		X	l	
SS-2	1	X	ı	X i		X	1	
SS-3	I	X	ı	x j		x	1	
SS-4	ı	x	1	x į		x	l	x
SS-5	1	X	l	x į		X	l	
SS-6	1	X	1	x i		X	ı	

- NOTES: X Specified sample analyzed for indicated parameter.
 - VO+15 Volatile Organics by EPA Method 624 (surface water) and by EPA Method 8240 (stream sediment) plus fifteen non-targeted compounds.
 - BN+15 Base Neutral Organics by EPA Method 625 (surface water) and by EPA Method 8270 (stream sediment) plus fifteen non-targeted compounds.
- PP Metals Priority pollutant metals by EPA 200 series or comparable ICP EPA Methods.
 - PCBs Priority Pollutant Polychlorinated Biphenyls (PCBs) by EPA Method 608 (surface water) and by EPA Method 8080 (stream sediment).

TABLE 6 SUMMARY OF ANALYTICAL PARAMETERS - AIR

TABLE 6: SUMMARY OF ANALYTICAL PARAMETERS - AIR L.E. CARPENTER, WHARTON, NEW JERSEY.

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 	ANALYTICAL PARAMETERS										
1	V0+15	ı	PP Metals								
== ==== 		:==== == 	************	[== 							
1	X X	1	X X	1							
1	X X	1 1	X X X	1							
1	X X	1	X X	1							
I ! !	X X X	1	X X X	1							
		V0+15	V0+15	V0+15							

NOTES:

- X Specified sample analyzed for indicated parameter.
- PP Metals Priority Pollutant Metals by EPA 200 series or comparable ICP EPA Methods.
 - VO+15 Volatile Organics by EPA Method 624 plus fifteen non-targeted compounds.
 - - Samples collected at four locations across site for each month.

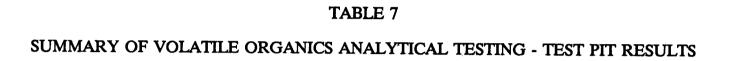


TABLE 7: SUMMARY OF VOLATILE ORGANICS ANALYTICAL TESTING - TEST PIT RESULTS BY EPA METHOD 8240+15

L.E. CARPENTER, WHARTON, NEW JERSEY.

(ug/kg)			FIELD **	TRIP **
SAMPLE ID:	TP-1A *	TP-1B *	BLANK	BLANK
DATE SAMPLED:	8/3/89	8/3/89	8/3/89	8/3/89
SAMPLE DEPTH (feet):	0 - 0.5	4.0 - 5.0		I I
Chloromethane	eesessess ND	l ND	 	 ND
Bromomethane	i ND	i ND	ם או	ו כאו
Vinyl chloride	I ND	i ND	i ND	I ND I
Chloroethane	I ND	i ND	ם או מאו	i ND !
Methylene chloride	; NO 1 28 J	1 30 J	ND 1.8 Jp	NO 4.2 Jp
1.1-Dichloroethene	i ND	1 ND	I ND	I ND I
1.1-Dichloroethane	I ND	i ND	I ND	I ND I
1.2-Dichloroethene (total)	i ND	I ND	i ND	ן לא ן ו לוא ו
Chloroform	i ND	I ND	נוא ז מא ו	ן לא ן ו מא ו
1.2-Dichloroethane	I ND	I ND	מא ו	ו שאו ו NO ו
1.1.1-Trichloroethane	I ND	I ND	I ND	ו מאו
Carbon tetrachloride	I ND	ם אם	I ND	ן שא ן 1 מא ו
Bromodichloromethane	I ND	I ND	I ND	ן כא ן ו מא נ
1.2-Dichloropropane	I ND	I ND	נאין ן T ND	ן פוא ו
trans-1,3-Dichloropropene	I ND	I ND	I ND	ו מא ו
Trichloroethene	ו אם	ן אם	I ND	ו מא ו
Dibromochloromethane	I ND	ם או	ON 1	ו מאון
1.1.2-Trichloroethane	ם או	ם און ו	מוא ן מוא ו	ן טא ן ו מא ו
Benzene	I ND	I ND	I ND	ן עא ן ו מא ו
cis-1,3-Dichloropropene	I ND	ן אט ו אם	ם או ו	ן טא ן
2-Chloroethyl vinyl ether	ם או	ם או	•	
Bromoform	I ND	ו אט	ND ND	MD I
1.1.2.2-Tetrachloroethane	ו ND	I ND	ND ND	l ND I
Tetrachloroethene	•	•=	I ND	ND 1
	1 ND	I ND	I ND	I ND I
Toluene	I ND	I ND	I ND	I ND I
Chlorobenzene	I ND	ND	I ND	I ND I
Ethylbenzene	I ND	l ND	ND	I ND I
Xylenes (total) \$	I ND	į ND	1 ND	I ND [
	!		1	1 1
TOTAL TARGETED VOC'S ***	28	30	ND ND	i ND i
	1	1	ľ	I i
Carbon disulfide	ND ND	I ND] 16	i no i
TOTAL NON-TARGETED VOC'S ***	ND ND	į ND	16	j ND j

p - Compound also detected in laboratory method blank.

and totaled here as a targeted compound because it is a compound of concern at this site.

ND - Not detected.

^{* -} Sample obtained by soil boring at MW-13s location.

^{** -} Analyzed by EPA Method 624 and reported in ug/l.

^{*** -} Excludes compounds detected in laboratory method blank (p); includes compounds detected at trace concentrations (J).

TABLE 7: SUMMARY OF VOLATILE ORGANICS ANALYTICAL TESTING - TEST PIT RESULTS
BY EPA METHOD 8240+15

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L.E. CARPENTER, WHARTON, NEW JERSEY.

(ug/kg) SAMPLE ID:	I TP-2A	I TP-2B	I TP-3A	I TP-38 #	1 TO 44	TD 4D	FIELD **			TRIP **
DATE SAMPLED:	3/23/89			•	•		BLANK	BLANK	BLANK	BLANK J
SAMPLE DEPTH (feet):	0 - 0.5		03/22/89		03/22/89 0 - 0.5			03/23/89	03/22/89	03/23/89
			•	•	U - U.J =======				•• 	(
Chloromethane	ND	J ND	l ND	ND I	j ND	ND	ND	ND	ן מא	ND I
Bromomethane	ND	Į ND	l ND	ND	I ND	ND	ND I	ND I	ND I	ND I
Vinyl chloride	ND	l ND	I ND	ND ND	ND	ND I	ND I	ND I	ND I	ND I
Chloroethane	ND	ND ND	I ND	ND	ND	ND I	ND 1	ND I	ND I	ND I
Methylene chloride	12 Jp	21 Jp	25 Jp	840 JB	21 Jp	890 JB	10 Jp	17 Jp	12 Jp	19 Jp
1,1-Dichloroethene	ND CM	J ND	I ND	ND	I ND I	ND I	ND I	ND I	ND I	ND I
1,1-Dichloroethane	ND	j ND	I ND	ND	I ND I	ND I	ND 1	ND I	ND I	ND I
1,2-Dichloroethene (total)	ND	T ND	j ND	ND	ND I	ND I	ND I	ND I	ND !	ND I
Chloroform	ND	ND ND	ND I	ND	ND I	ND I	ND I	ND I	ו מא	ND I
1,2-Dichloroethane	ND	ND ND	I ND	ND	ו סאו	ND I	ND I	ND I	ND 1) GN
1,1,1-Trichloroethane	ND	12	I ND :	ND I	ND I	ND I	ND I	ND I	ND 1	ND I
Carbon tetrachloride	ND	ND ND	I ND i	ND :	ND I	ND 1	ND I	ND I	ND I	ND I
Bromodichloromethane	ND	ND ND	י מא <u>ו</u>	ND I	i ND i	ND I	ND I	ND I	ND I	ND I
1,2-Dichloropropane	ND	I ND	ו מא ו	ND I	ND 1	ND I	ND I	ND I	ND I	ND I
trans-1,3-Dichloropropene	ND	מא ו	 L ND i	ND I	ND I	ND I	ND I	ND I	ND I	ND I
Trichloroethene	ND	ND	l ND i	ND I	i ND i	ND 1	ו מא	ND I	ND I	ND I
Dibromochloromethane [ND	ND	י מא ו	ND	ND 1	ND I	ND 1	ND I	ND 1	ND I
1,1,2-Trichloroethane	ND	I ND.	I ND	ND	ND I	ND I	ND I	ND 1	ND I	ND I
Benzene j	ND	I ND	I ND I	ND	ND I	ND I	ND I	ND I	ND I	ND I
cis-1,3-Dichloropropene	ND	ND	i ND i	ND	ND I	ND I	ND I	ND 1	ו מא	ND I
2-Chloroethyl vinyl ether	ND	12	l ND I	ND I	ו מא	ND I	ND I	ND I	ND I	ND I
Bromoform	ND	GN	l ND i	ND I	ND 1	ND I	ND I	ND I	ND I	ו מא
1,1,2,2-Tetrachloroethane	. מא	ND ND	i ND i	ND I	ND I	ND i	ND 1	ND I	ND I	
Tetrachloroethene [ND i	ND	i ND i	ND I	ND I	ND I	ND I	ND I	ND 1	I CN
Toluene i	ND i	ND	l ND I	ND 1	ND I	ND I	ND I	ND I	ND I	ND
Chlorobenzene	ND	ND	ו לוא	ND I	ו מא	ND I	ND I	ו מא	ND 1	ND I
Ethylbenzene I	ND I	ND	i ND i	14000	ND I	650 t	ND 1		,	ND 1
Xylenes (Total) 9	ND I	ND	l ND i	31000 I	ND i	21000		ND I	ND	ND
TOTAL TARGETED VOC'S ***	ND 1	12	I ND I	45840 #1	ND I	22540	ND 1	ND	ND I	ND I
1			ן שאי ן !	42040 #1	um I	22340	ND [ND	ND Î	ND I
l.1.2-Trichloro-	1	 	 		!	- 1		!	!	!
2,2,1-trifluoroethane	19	38	i 34 i	I ND i	ND I	, AUS	1	1	!	i
Acetone	ND I	ND I	I ND I	•		ND	ND [ND	ND [NO I
otal Carbon Disulfide	ND i	ו מא	ן טוא ן ו CIN ו	ND I	ND	1000 j	ND [ND [ND	i CM
otal Other	ND 1	785	ן טוא ו ו ND ו	ND I	ND 1	ן מא	ND	12	ND	ND [
Total Unknown	ND I	803		ND	ND 1	ND [ND	ND	ND [ND
TOTAL NON-TARGETED VOC'S I			ND 1	ND I	ND I	ND]	ND I	ND 1	ND [ND [
SOLVE MONE INVOSTED AND 2	19	1626	34	ND # J	ND j	1000	ND	12	ND I	ND I

p - Compound also detected in laboratory method blank.

B - Compound also detected in laboratory method blank. Sample concentration is at least 5 times above method blank's.

^{# -} NJDEP Tier I sample holding time was exceeded.

^{9 -} Xylene was analyzed by the laboratory as a non-targeted compound. Xylene is listed and totaled here as a targeted compound because it is a compound of concern at this site.

ND - Not detected.

^{** -} Analyzed by EPA Method 624 and reported in ug/l.

^{*** -} Excludes compounds detected in method blank (p); includes compounds detected at trace concentrations (J) and (B).

TABLE 7: SUMMARY OF VOLATILE ORGANICS ANALYTICAL TESTING - TEST PIT RESULTS BY EPA METHOD 8240+15

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L.E. CARPENTER, WHARTON, NEW JERSEY.

(ug/kg)									FIELD **	TRIP **
					TP-7A				BLANK	BLANK
DATE SAMPLED:					03/23/89		03/23/89	03/23/89	03/23/89	03/23/69
SAMPLE DEPTH (feet):	10 - 0.5				0 - 0.5		•	2.5 - 3	•	•• !
Chloromethane	ND	ND ND	ND	ND	ND	ND	ND :	ND	ND I) CN CN
Bromomethane	ND	I ND	ND	ND (ן מא	ND (ND	ND	ND	ND I
Vinyl chloride	ND	I ND	ND	ND	ND j	ND I	ND	ND J	ND j	ND I
Chloroethane	ND	j ND	ND	ND	ND j	ND [ND	ND	ND !	ND I
Methylene chloride	30 Jp	29000 JB	220	29 Jp	230	23000 J	18 J	4200 J	17 Jp	19 Jp
1,1-Dichloroethene	į ND	ND ND	ND (ND (ND J	ND j	ND	ND j	ND 1	ND I
1,1-Dichloroethane	I ND	I ND	ND	ND	ND 1	ND I	ND I	ND I	ND I	ND I
1,2-Dichloroethene (total)	I ND	I ND	GN	ND	ND	ND I	ND j	ND I	ND I	ו מא
Chloroform	I ND	I ND	ND 1	ND	ND	ND	ND I	ND I	ND I	ND I
1,2-Dichloroethane	j ND	ND	ND	ND	ND I	ND I	ND I	ND I	ND I	ND 1
1,1,1-Trichloroethane	ND	ND !	ND	ND	ND j	ND [ND I	ND I	ND I	ND I
Carbon tetrachloride	ND	I ND	ND I	ND	ND I	ND 1	ND I	ND I	ND I	ND 1
Bromodichloromethene	I ND	ND	ND	ND I	ND I	ND I	ND 1	ND I	ND 1	ND 1
1,2-Dichloropropane	I ND	J ND	ND	ND i	ND I	ND I	ND I	ND I	ND I	ND I
trans-1,3-Dichloropropene	I ND	j ND	ND	ND I	ND I	ND I	ND I	ND 1	ND I	ND I
Trichloroethene	ם או	ND I	ND	ND I	ND I	ND I	26	ND I	ND I	ND I
Dibromochloromethene] ND	ND	ND j	ND I	ND I	ND I	ND I	ND I	ND I	I DN
1,1,2-Trichloroethane	I ND	ND	ND	ND I	ND (ND I	ND I	ND I	ND I	ND I
Benzene	ND I	ND	ND	ו מא	ND j	ND I	ND I	ND I	ND I	ND I
cis-1,3-Dichloropropene	GN	ND	ND I	ND į	ND 1	ND I	ND 1	ND I	ND I	ND I
2-Chloroethyl vinyl ether	I ND	ND	ND	ND I	ND I	ND I	ND I	ND I	ND I	ND I
Bromoform	J ND	ND	ND I	ND I	ND I	ND I	ND I	ND 1	ND I	ND I
1,1,2,2-Tetrachloroethane	ND	ND j	ND I	ND I	ND I	ND I	ND I	ND I	ND I	ND I
Tetrachloroethene	J ND	ND I	ND I	ND I	ND I	ND 1	ND I	ND I	ND I	ND I
Toluene	J ND	ND I	ND I	ND I	ND 1	ו מא	ND I	ו מא	ND I	ND I
Chlorobenzene) ND	ND I	ND I	ND I	ND I	ND I	ND I	ND I	ND I	ND I
Ethylbenzene	l ND I	43000 1	ND I	ND I	ND I	93000 1	ND I	ND I	ו מא	ND 1
Xylenes (Total) 9	I 19 I	460000 1	ND I	42	ND I	34000 I	ND I	ND I	ן טא	ND I
TOTAL TARGETED VOC ***	I 19	532000 I	220	42 1	230 1	150000	44 1	4200 I	ND I	ו מא
	1	,	1	I	1	120000		4200	ן שה	יו טא
1.1.2-Trichloro-	i		i	i	,	-	- }	!	;	1
2.2.1-trifluoroethane	18	ND 1	130 (16 I	130 I	ND I	17 1	AMD 1	APP 4	1
Total Cyclohexane Compound		ND I	ND I	ND I	ND 1	ND 1	13 ND 1	ND 3400	ND I	ND [
Carbon Disulfide	I ND I	ND I	ND I	ND 1	ND I	ND I			ND [ND I
Total Other	I ND I	ND I	ND I	795 I	ND I		ND }	ND	12	ND
Total Unknown	NDI	ו מא	990 1	1000 I	ן עוא ו שוא	39000 145000	ND I	30500 32400	ND j	ND

p - Compound also detected in laboratory method blank.

B - Compound also detected in laboratory method blank. Sample concentration is at least 5 times above method blank's.

^{9 -} Xylene was analyzed by the laboratory as a non-targeted compound. Xylene is listed and totaled here as a targeted compound because it is a compound of concern at this site.

ND - Not detected.

^{** -} Analyzed by EPA Method 624 and reported in ug/l.

^{*** -} Excludes compounds detected in method blank (p); includes compounds detected at trace concentrations (J) and (8).

TABLE 7: SUMMARY OF VOLATILE ORGANICS ANALYTICAL TESTING - TEST PIT RESULTS
BY EPA METHOD 8240+15

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L.E. CARPENTER, WHARTON, NEW JERSEY.

(ug/kg)									FIELD *	TRIP *	•
SAMPLE ID:	TP-9A	•	TP-10				TP-14		BLANK	BLANK	ŀ
DATE SAMPLED:		3/27/89							3/27/89	3/27/89	ı
SAMPLE DEPTH (feet):	0 - 0.5			7.5 - 8	•	5.5 - 6			! !	••	ļ
Chloromethane	ND	I ND	I ND	ND	ND	ND	I ND	ND	ND	ND	1
Bromomethane	ND	I ND	םא ן	I ND	I ND	[ND	Į ND	I ND	, ND	ND	i
Vinyl chloride	ND	ND ND	I ND	I ND	Į ND	ND ND	I ND	j ND	J ND	ND	i
Chloroethane	ND ND	ND ND	ND ND	[ND	j ND	ND	j ND) ND	ND	ND ND	ı
Methylene chloride	82	18 J	j 1100 J	43	4800 JB	36000 JB	1 24 JB	15 J	9.3 Jp	8.0 Jp	ı
1,1-Dichloroethene	I ND	[ND	I ND	ND	I ND	ND	, ND	I ND	I ND I	ND.	ı
1,1-Dichloroethane	ND	J ND	l ND	ND ND	I ND	j ND	I ND	I ND	I ND I	ND	i
1,2-Dichloroethene (total)	j ND	Į ND	J ND	[ND	I ND	I ND	l ND	ND	I ND I	ND	ı
Chloroform	ND I	j ND) ND	I ND	I ND	l ND	I ND	I ND .	I ND I	ND	1
1,2-Dichloroethane	[ND	I ND	I ND	j ND	ND	l ND	I ND	ם או	ND I	ND	
1,1,1-Trichloroethane	15	j ND	ND ND	ND	I ND	i ND	I ND	. ND		ND I	
Carbon tetrachloride	I ND	[ND] ND	I ND	I ND	I ND	I ND	I NO	ו מא	ו מא	1
Bromodichloromethane	ND	ND	l ND	l ND	ND	I ND	I ND	I ND	I ND I	ND 1	
1,2-Dichloropropane	[ND	I ND	I ND	l ND	ND	I ND	I ND	I ND	ND I	ND I	
trans-1,3-Dichloropropene	[ND	j ND	I ND	ND	I ND	I ND	l ND	I ND I	ND I	ND I	
Trichloroethene	ND	j ND	l ND	l ND	ND	I ND	I ND	ו מא	ND I	ו סא	
Dibromochloromethane	[ND	J ND	ND ND	l ND	I ND :	I ND	I ND	l ND	ND I	ND I	
1,1,2-Trichloroethane	ND	I ND	l ND	, J ND I	. ND	l ND	I ND I	I ND 1	ו כוא ו	ND I	
Benzene	j ND	I ND	, ND	J ND I	ND	I ND	ND I	ND I	ו פא ו	ו מא	
cis-1,3-Dichloropropene	ND	I ND	ND ND	l ND	. ND	I ND	ND I	ND I	ו מא	I GN	
2-Chloroethyl vinyl ether	j ND	l ND	l ND	1 ND i	ND ND	l ND	ND I	ו מא	ו מא	ו מא	
Bromoform	i ND	l ND	I ND	I ND i	ND I	l ND	ND I	ND I	ND I	ND I	
1,1,2,2-Tetrachloroethane	I ND	l ND	I ND	l ND	ND	ND	I ND I	I ND I	ND I	ND 1	
Tetrachloroethene	I ND	I ND	ND	I ND	ND I	I ND	i ND i	I ND I	ND I	ND I	
Toluene	l ND	l ND	ND	I ND	1.15 ND	I ND	i ND i	ו מא ו ו מא ו	ND I		
Chlorobenzene	I ND	I ND	ND	l ND 1	ו מא ו	i ND	י עצא י ו מוא	ן טא ו ו מא ו	•	ND	
Ethylbenzene	I ND	1 ND	930	i de i	I ND I	330000 I	1.8 J	ן כוא ו CIN	ND I	ND I	
Xylenes (total) 9	I ND	I ND	12000	i ND i	120000 (330000 2200000			ND J	ND	
TOTAL TARGETED VOC ***	97	1 18	14030	; ND 43	124800	2200000 2566000	ND [ND j	ND	ND [
	, I	1	1	 	124600	2200000	26.8	15	ND	ND į	
1,1,2-Trichloro-	i	1	; I	' I					!	1	
2,2,1-trifluoroethane	י מאו	י I ND :	l ND		l Min i	l 1				1	
Total Cyclohexane compound	•	I ND I	8110	12	ND I	ND [ND I	ND	ND (ND	
Total Decane compounds	i ND	I ND !			ND	ND	ND	ND	ND 1	ND 1	
Total Other compounds	i ND	•	ND	i ND i	ND	ND [ND [200	ND I	ן מא	
Total Unknown compounds	I ND	ND	7300	MD į	ND	ן לא	ND	1620	ND	ND j	
TOTAL NON-TARGETED VOC	•	I ND [55	ND I	13000	ND I	ND	4250	ND [ND	
IDIAL MON-TARGETED ADD	ND D	l ND (15465	12	13000	ND J	ND j	6070	ND I	ND I	

p - Compound also detected in laboratory method blank.

B - Compound also detected in laboratory method blank and sample concentration is over 5 times the method blank's.

^{9 -} Xylene was analyzed by the laboratory as a non-targeted compound. Xylene is listed and totaled here as a targeted compound because it is a compound of concern at this site.

ND - Not detected.

^{** -} Analyzed by EPA Method 624 and reported in ug/L.

TABLE 7: SUMMARY OF VOLATILE ORGANICS ANALYTICAL TESTING - TEST PIT RESULTS

BY EPA METHOD 8240+15

L.E. CARPENTER, WHARTON, NEW JERSEY.

(ug/kg)		11211 021102	••		FIELD	** FIELD	** TRIP *	• TRIP ••
,	TP-16	TP-17	TP-18	TP-19	BLANK	BLANK	BLANK	BLANK
DATE SAMPLED:	3/29/89	3/29/89	3/28/89	3/28/89	3/28/89	3/29/89	3/28/89	3/29/89 [
SAMPLE DEPTH (feet):	4.0	4.0	5.5 - 6	3.5 - 4	••		· 	
		********			*********			
Chloromethane	I ND	I ND	ND ND	l ND	j ND	Į ND	ND ND	j ND j
Bromomethane	ND 1	ND ND	I ND	j ND	į ND	J ND	ND	I ND I
Vinyl chloride	i ND	ND ND	[ND	l ND	[ND	j ND	I ND	l ND i
Chloroethane	, ND	j ND	I ND	Į ND	j ND	ND	I ND	l ND i
Methylene chloride	65000 JB	1400 JB	18000	16000	2.6 Jp	j 5.6 Jp	7.7 Jp	7.1 Jp
I,1-Dichloroethene	I ND	ND ND	I ND	ND	Į ND	j ND	j ND	j ND j
1,1-Dichloroethane	j ND	ND	I ND	I ND	l ND	l ND	l ND	l ND l
1,2-Dichloroethene (total)) ND	j ND	j ND	I ND	j ND	j ND	j ND	l MD i
Chloroform	םא ן	l ND	ם א	l ND	l ND	j ND	I ND	I ND I
1,2-Dichloroethane	I ND	l ND	I ND	ND	ND	l ND	I ND	I ND E
1,1,1-Trichloroethane	I ND	l ND	ND	j ND	ND	l ND	I ND	ND
Carbon tetrachloride	l ND	ND ND	j ND	ND	l ND	I ND	ND ND	I ND I
Bromodichloromethane	ND	ND ND	j ND	1 ND	l ND	l ND	j ND	j ND j
1,2-Dichloropropane	ND ND	ND ND	I ND	ND	l ND	ND ND	ND	I ND 1
trans-1,3-Dichloropropene	ND	ND ND	j ND	j ND	ND ND	l ND	I ND	ND
Trichloroethene	ND	Į ND	I ND	Į ND	ND	j ND	I ND	i ND j
Dibromochloromethane	j ND	I ND	j ND	l ND	ND	j ND	I ND	ND
1,1,2-Trichloroethane	ND	j ND	j ND	I ND	ND	j ND	j N D	ND
Benzene	j ND	j ND	Į ND	ND	ND	I ND	Į ND	I ND I
cis-1,3-Dichloropropene	j ND	l ND	j ND	ND	ND	ND	, ND	I ND [
2-Chloroethyl vinyl ether	į ND	l ND	I ND	ND	[ND	j ND	[ND	ND I
Bromoform	į ND	j ND	j ND	ND) ND	j ND	ND	I ND
1,1,2,2-Tetrachloroethane	j ND	l ND	ND	ND	ND) ND	j ND	I ND
Tetrachloroethene	į ND	Į ND	I ND	l ND] ND	ND	j ND	I ND I
Toluene	j ND	, ND	j ND	l ND	ND	ND ND	ND	I ND I
Chlorobenzene	j ND	j ND	l ND	ND	ND	ND	l ND	l ND I
Ethylbenzene	220000	J ND	28000	5800	ND	ND	j ND	i ND i
Xylenes (total) @	710000	7000	39000	15000	ND	, ND	l ND	l ND I
TOTAL TARGETED VOC ***	995000	8400	85000	36800	i ND] ND	ND ND	l ND i
	1	I	ŀ	ı	1	1	1	i i
1,1,2-Trichloro-	1	I	1	1 .	1	I	1	i i
2,2,1-trifluoroethane	93000	990	17000	16000	Į ND	j ND	l ND	I ND I
Total Cyclohexane compound	64000	I ND	256000	44000	, ND	ND	l ND	ND
Total Pentane compounds	ND ND	860	94000	79000	ND	, ND	I ND	I GN I
Carbon Disulfide	ND	I ND	ND ND	ND ND	, ND	8.4	J ND	I DO I
Total Other compounds	42000	I ND	425000	107400	j ND	J ND	I ND	. ND I
Total Unknown compounds	83000	, ND	24900	4600	l ND	j nd	, I ND	ND I
TOTAL NON-TARGETED VOC	282000	1850	816900	251000	•	8.4	I ND	I ND I
	•	•	•	•	•	•	•	

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- p Compound also detected in laboratory method blank.
- B Compound also detected in laboratory method blank and sample concentration is over 5 times over method blank's.
- 9 Xylene was analyzed by the laboratory as a non-targeted compound. Xylene is listed and totaled here as a targeted compound because it is a compound of concern at this site.
- ND Not detected.
- ** Analyzed by EPA Method 624 and reported in ug/L.
- *** Excludes compounds detected in method blank (p); includes compounds detected at trace concentrations (J) and (B).

TABLE 7: SUMMARY OF VOLATILE ORGANICS ANALYTICAL TESTING - TEST PIT RESULTS BY EPA METHOD 8240+15

L.E. CARPENTER, WHARTON, NEW JERSEY.

(ug/kg)					FIELD *	* FIELD *	• FIELD •	• TRIP ••	TRIP **	TRIP *
SAMPLE ID:	• ==	TP-21	,	TP-23	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK
DATE SAMPLED:	3/27/89	3/27/89	3/30/89	4/11/89	3/27/89	3/30/89	4/11/89	3/27/89	3/30/89	4/11/8
SAMPLE DEPTH (feet):	3.5 - 4		4.5	3.5 - 4	!	l			1	
Chloromethane	ND	ND	ND	ND	ND	i ND	ND	 ND	ND I	ND
Bromomethane	ND	ND	ND ND	l ND	ND	I ND	ND	ND	ND I	ND
Vinyl chloride	j ND	l ND	ND	l ND	I ND	I ND	ND	l ND I	ND I	ND
Chloroethan e	I ND	ND	ND	i ND	I ND	I ND	ND	ND I	ND I	ND
tethylene chloride	310000	120000 J	210	380	9.3 Jp	1 19 J	10 J	8.0 Jp	6.6 J	9.6 J
l,1-Dichloroethene	ND	I ND	ND	I ND	i ND	J ND	ND I	I ND I	ND I	ND
1,1-Dichloroethane	I ND	I ND I	ON	I ND	I ND	I ND	ND I	ND I	ו מא	ND
1,2-Dichloroethene (total)	I ND	I ND 1	ND ND	I ND	I ND	I ND	ND I	, nd i	ו מא	ND
Chloroform	, ND	I ND	ND	I ND	I ND	I ND	, ND I	ו פטר ו ו מא ו	ו מא	ND
,2-Dichloroethane	l ND	I ND	ND	I ND	i ND	ו אם ו	ND I	ND I	ND I	ND
1,1,1-Trichloroethane	I ND	I ND I	ND	I ND	I ND	l ND	ND I	I ND I	ו מא	ND
Carbon tetrachloride	I ND	l ND	ND	ND	I ND	I ND	ND I	ND I	ND I	ND
romodichloromethane	I ND	i ND I	ND	l ND	I ND	ו מא	ND I	ND I	ND I	ND
,2-Dichloropropane	I ND	i ND I	ND	ND ND	ND ND	ND	I ON	ן כאי ו מא ו	ND I	ND
rans-1,3-Dichloropropene	j ND	I ND	ND		l ND	I ND (ND I	ND I	ND I	ND
richloroethene	1 ND	I ND i	ND	ND	l ND	I ND I	ND I	ן לא ן	ND I	ND
ibromochloromethane	l ND	I ND I	ND	ND ND	l ND	l ND i	ו מא	ND I	ND I	ND
,1,2-Trichloroethane	l ND	I ND I	ND	ND ND	I ND I		ND I	ND I	ND I	ND
Benzene	I ND	i ND i	ND	ND ND	I ND	ND I	ND i	i DN	ND i	ND
:is-1,3-Dichloropropene	I ND	I ND I	ND	ND	ו מוא ו	i ND i	ו פא	ו מא	ND I	ND
2-Chloroethyl vinyl ether	i ND	I ND I	ND	I ND	I ND I	ו כוא ו ו כוא ו	ND I	ND I	ND I	ND
Bromoform	I ND	I ND I	ND	I ND	I ND I	ו מא ו ו מא	ן כא	ו מא	ND i	ND
1,1,2,2-Tetrachloroethane	I ND	l ND i	ND	ND I	i ii. I ND i	י כאי ו מא	ND I	ND I	ND I	ND
etrachloroethene	I ND	I ND I	ND	ND I	ו מא	ו מא ו	ND i	ND I	ND I	ND
oluene	I ND	1 37000 J I	ND	ND I	I ND I	ו לא ו	ND I	ND i	ND i	
chlorobenzene	I ND	I ND I	ND	ND	I ND I	I ND I	ND I	ND I	אם ו 1 מא	ND
thylbenzene		1 1700000 i	ND (ND I	ND I	I ON I	ו מא			ND
		1 7400000 I	ND:	ND I	i ND i	ו מא ו		ND	ND	ND
	12970000	7335000 9275000	210	780 380	ן כוא ו ו DND ו	ן עא 19	ND	ND j	ND	ND
	1	<i> </i>	210	200	ן שאון	12	10	ND	6.6	9.6
.1.2-Trichloro-	' '	;		 -	i		Į	ļ	Į.	
2.2.1-trifluoroethane	I I ND	i ND 1	110	A:F- 4	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	. !	I	ا ا		
otal Other compounds	•		110	ND (ND [14	ND	ND	ND	ND
•	I ND	l ND I	ND (ND	ND J	18	ND {	ND į	ND	ND
otal Unknown compounds	I ND	ND	ND	ND	ND	ND J	ND	ND	ND [ND
OTAL NON-TARGETED VOC	ם א	ND	110	ND	ND	32 j	ND [ND [ND	ND

p - Compound also detected in laboratory method blank.

B - Compound also detected in laboratory method blank and sample concentration is over 5 times the method blank's.

^{9 -} Xylene was analyzed by the laboratory as a non-targeted compound. Xylene is listed and totaled here as a targeted compound because it is a compound of concern at this site.

ND - Not detected.

^{** -} Analyzed by EPA Method 624 and reported in ug/1.

^{*** -} Excludes compounds detected in method blank (p); includes compounds detected at trace concentrations (J) & (B).

FIELD ** FIELD ** TRIP ** TRIP **

BY EPA METHOD 8240+15

L.E. CARPENTER, WHARTON, NEW JERSEY.

(ug/kg)

				LTEFD	. LIETA .	- IRLE "	IKIP **	
SAMPLE ID:	TP-24	TP-25 #	TP-26	BLANK	BLANK	BLANK	BLANK	ı
DATE SAMPLED:	3/29/89	3/30/89	3/30/89	3/29/89	3/30/89	3/29/89	3/30/89	i
SAMPLE DEPTH (feet):	4.5	2.5	4.0		!	J	l	ı
Chloromethane	, ND	ND ON	ND ND	ND ND	 ND	i ND	j essenana J ND	 -
Bromomethane	ND ND	I ND	ND I	I ND	I ND	I ND	I ND	i
Vinyl chloride	ND ND	ND	ND	ND	ND	I ND	I ND	
Chloroethane	ND	I ND	I ND	ND	I ND	. ND	I ND	i
Methylene chloride	150000 B	26 JB	93000 JB	5.6 Jp	19 J	7.1 Jp	I 6.6 J	i
1,1-Dichloroethene	I ND) ND	I ND	ND ND	ND ND	ND .	I ND	
1,1-Dichloroethane	I ND	ND I	ND	ND.	ND	םא ו	I ND	i
1,2-Dichloroethene (total)	ND	ND	I NO	ON I	I ND	ND ND	I ND	i
Chloroform	ND	ND	I NO	ND	I ND	ND i	ם או	i
1,2-Dichloroethane	I ND	ND	I ND	ND	ND	ND I	I ND	i
1,1,1-Trichloroethene	I ND	ND	ND	ND	I ND	ND I	. ND	i
Carbon tetrachloride	i ND	ND ND	ND	ND	l ND	ND I	ND	i
Bromodichloromethane	ND	ND	l ND i	ND I	l ND	ND	ND	i
1,2-Dichloropropane	I ND	ND ND	ND I	ND	. ND	ND I	ND ND	i
trans-1,3-Dichloropropene	I ND	ND	ND 1	ND I		ND I	ND I	i
Trichloroethene	I ND	ND	ND	ND I	ND I	ND I	ND I	i
Dibromochloromethane	I ON	ND	ND	ND	ND I	ND I	ND I	
1,1,2-Trichloroethene	ND	ND	l ND i	ND I	ND i	ND I	ND I	ì
Benzene	ND	ND	l ND j	ND	ND I	ND I	ND I	ĺ
cis-1,3-Dichloropropene	I ON	ND	ND	ND i	ND I	ND I	ND	i
2-Chloroethyl vinyl ether	I ND	ND I	ND I	ND !	ND i	ND I	ND 1	í
Bromoform	ND	ND	ND I	ND I	ND i	ND I	ND I	
1,1,2,2-Tetrachloroethane	I ND	ND.	ND I	ND I	ו מא	ND I	ND I	í
Tetrachloroethene	I ND	ND	ND I	ND 1	ND I	ND I	ND 1	ŕ
Toluene	ND	4.8 J	NO I	ND I	ND 1	ND I	ND I	
Chlorobenzene	l ND l	ND ,	ND I	ND I	ND I	ND I	ND I	
Ethylbenzene	230000	ND	180000	ND I	ND I	ND I	ND i	
Xylenes (total) @	980000	15	1200000	ND I	ND I	ND I	ו מא	
TOTAL TARGETED VOC ***	1360000	45.8 #	1473000	ND I	19	ND I	6.6	
	l j	Ì	i	i		1	1.0	
1,1,2-Trichloro-	i i	ì	, 	i		,	,	
2,2,1-trifluoroethane	ND I	ND I	69000 I	ND 1	14	ND I	ND I	
Total Acetone	I ND I	450	ND I	ND I	ND 1	ND 1	ND I	
Carbon disulfide	l ND i	ND	ND I	8.4	ND 1	ND I	ND I	
Total Other compounds	j ND j	201	ND I	ND I	18	ND I	I GN	
Total Unknown compounds	133000	50 j	ND I	ND I	ND 1	ND I	ND I	
TOTAL NON-TARGETED VOC	133000	701 #	69000 j	8.4	32	ND I	I CIN	

- \boldsymbol{p} Compound also detected in laboratory method blank.
- B Compound also detected in laboratory method blank and sample concentration is over 5 times the method blank's.
- # NJDEP Tier I sample holding time was exceeded.
- 9 Xylene was analyzed by the laboratory as a non-targeted compound. Xylene is listed and totaled here as a targeted compound because it is a compound of concern at this site.
- ND Not detected.
- ** Analyzed by EPA Method 624 and reported in ug/l.
- *** Excludes compounds detected in method blank (p); includes compounds detected at trace concentrations (J) & (B).

TABLE 7: SUMMARY OF VOLATILE ORGANICS ANALYTICAL TESTING - TEST PIT RESULTS BY EPA METHOD 8240+15

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		, NEW JERSE	Υ.		FIELD	** FIELD	** FIELD	** TRIP *	* TRIP	** TRIP **
SAMPLE ID: (ug/kg)	TP-27	TP-28	TP-29	TP-33	BLANK		BLANK	I BLANK	BLANK	BLANK
DATE SAMPLED:	3/29/89	3/28/89				3/29/89	3/29/89	1 3/28/89	3/29/89	•
SAMPLE DEPTH (feet):	1 4.5	5.0 -6.0	4.5 -5.0	7.5 -8.0	il	1	1	1		1
Chloromethane	j ND	ND I	ND	ND	j nd	= ND	» (======= J ND	ND		•
Bromomethane	I ND	I ND	ND	ND	I ND	l ND	I ND	I ND	l ND I ND	I ND
Vinyl chloride	j ND	ן מא ן	ND	I ND	ND	I ND	I ND	I ND	i ND	I ND
Chlorosthane	I ND	I ND I	ND	I ND	I ND	I ND	I ND	I ND	ם או	j ND I ND
Methylene chloride	5000 B	1 170000 q	35000 q	840 B	2.6 Jp	1 5.6 Jp	•	1 7.7 Jp	7.1 Jp	
1,1-Dichloroethene	j ND	ND	NÖ	I ND	J ND	I ND	I ND	I ND	I ND	7.1 7 p
1,1-Dichloroethane	ND ND	ן מא ן	NO	ND ND	I ND	l ND	I ND	ם או	I ND	I ND
1,2-Dichloroethene (total)) ND	I ND I	ND	i ND	l ND	I ND	I ND	l ND	מא ו מא ו	I ND
Chloroform	l NO	i ND i	ND	ND ND	l ND	I ND	I ND	I ND		I ND
1,2-Dichloroethane	ND	I ND I	ND	I ND	I ND	I ND	i ND	I ND	l NO	ND
1,1,1-Trichloroethane	ND	I ND I	ND	ND ND	1 ND	i ND	ם או		l ND] ND
Carbon tetrachloride	i ND	I ND i	ND	ND	I ND	ם או	i ND	I ND	ND ND	ND
Bromodichloromethane	į NO	i ND i	ND:	ND	ו אם	I ND	i ND	ND ND	ND	I ND 1
1,2-Dichloropropane	I ND	I ND I	ו מא	ND	I ND	I ND	ם או	ND	ND	I ND
trans-1,3-Dichloropropene	I ND	I ND I	ND I	ND	I ND	ו אם	ם או	ND	ND	I ND I
Trichloroethene	[ND	I ND 1	ND I	ND	l ND	I NO	ו אט	ND (ND	I ND I
Dibromochloromethane	I ND	l ND i	ND 1	ND	I ND	1 ND	ו אם	ND	ND	I ND 1
1,1,2-Trichloroethane	j ND	l ND i	ND I	ND	I ND	I ND		l ND	ND	I ND I
Benzene	i ND	I ND	ND I	ND	I ND	i ND	I ND	ND (ND	i no i
cis-1,3-Dichloropropene	l ND	ND I	ND I	ND	I ND	•	I ND (ן מא ן	ND	l ND i
2-Chloroethyl vinyl ether	l ND	I ND I	ND I	ND	i ND	I ND	I ND	ND	ND	l ND l
Bromoform	ND.	l ND I	ו מא	ND	מא ו	I ND	I NO I	ND [ND	l ND 1
1,1,2,2-Tetrachloroethane	l ND	ND I	ND 1	ND I	ם או	I ND	I ND I	ן מא	ND	ND 1
Tetrachloroethene	I ND	l ND i	ND I	ND (I ND	l ND	ן מא	ND [ן מא ן
Toluene	I ND	ND I	ND 1	ו מא	ND ND	I ND	I ND	ו מא	ן פא	ן מא
Chlorobenzene	I ND	ו מא	ND I		ND	l ND	l ND i	ND	ND	ND
Ethylbenzene	1 2900	290000 1	31000 I	ND (ND	l ND	ן מא ן	ND]	ND [ND [
Kylenes (total) @	1 18000	880000 1	120000	1100	ND	l ND	i ND i	ND	ND J	ND į
TOTAL TARGETED VOC ***	1 20900 1	1340000	186000 1	9500	ND #	I ND	1 ND 1	NO	ND 1	ND
1.1.2-Trichloro-	l 20200 (1240000	100000	11440	ND "	j ND	ן מא ן	ND	ן מא	ND 1
2,2,1-trifluoroethane	i 5700 i	430000 I	70000			l	1	1	1	i
entane, 3-methyl	3700 ND.		38000 J	WD I	ND	ON	ן מא ן	ND	ND	NO
Total Pentane	i 720 i	ND	ND	340 j	ND	ND.	ן מא	ND	ND [ND ;
Total Cyclopentane Compoun	,	86000	27000	ND	ND	ND ND	ן סא ן	ND	ND	ND I
lexane, 2-methyl		ND	ND [6330	ND	MD	ן מא ן	ND	ND }	I GN
leptane, 3-methyl	ND I	ND	ŃD	250	ND	ND	ND	ND	ND j	ND į
Total Cyclohexane	ND	ND	ND [500	ND	ND	ND [ND	ND 1	ND I
•	3100 J	45000 j	54000	ND [ND (ND	ND j	ND I	ND 1	ND I
Carbon disulfide	ND 1	ND I	ND	ND	ND	8.4	8.4	ND	ND I	ND i
•	7700 J	63000	95500	6440	ND	ND	ND I	ND i	ND I	ND I
otal Unknown	1900	67000	17000	1700	ND	ND	ND 1	ND I	ND I	ND
OTAL NON-TARGETED VOC	19120	691000	231500	15560	ND +	8.4	8.4	ND 1	ND I	ND I
OTES: q - Compound also o	letected i	n the metho	d blank at	Over 5 +	1=00 +bo C	ROI The m				110

NOTES: q - Compound also detected in the method blank at over 5 times the CRDL. The method blank is rejected as per NJDEP GAS.

J - Detected below reporting limit or is an estimated concentration.

p - Compound also detected in laboratory method blank.

B - Compound also detected in laboratory method blank and sample concentration is over 5 times method blank's.

^{9 -} Xylene was analyzed by the laboratory as a non-targeted compound. Xylene is listed and totaled here as a targeted compound because it is a compound of concern at this site.

^{* -} Xylenes, acetone, and styrene were found in the quantitation reports for the method blank associated with this field blank but were not reported in the non-target compound lists as they should have as per NJDEP QAS. The end user should not ignore the presence of these analytes because they were found in high concentration.

^{** -} Analyzed by EPA Method 624 and reported in ug/l.

^{*** -} Excludes compounds detected in method blank (p) & (q); includes compounds detected at trace concentrations (J) & (B).

BY EPA METHOD 8	3240+15						_		
L.E. CARPENTER,	WHARTON,	NEW JERSEY	•		FIELD	** FIELD	** TRIP *	* TRIP	••
SAMPLE ID: (ug/kg)	TP-39 *	TP-42	TP-43	TP-44	BLANK	BLANK	I BLANK	I BLANK	1
DATE SAMPLED:	3/30/89	4/4/89	4/4/89	4/4/89	3/30/89	4/4/89	3/30/89	1 4/4/89	, } i
SAMPLE DEPTH (feet):	2.5			6.0 -6.5				·	i
222200000000000000000000000000000000000	12 2200 22 01						, 20022999	, 2200000	==
Chloromethane	I ND	I ND	I ND	I ND	, ND	I ND	I ND	I ND	i
Bromomethane	ND	l ND	ND ND	I ND	I ND	I ND	I ND	l ND	i
Vinyl chloride	[ND	ND	I ND	I ND	ND	I ND	I ND	I ND	i
Chloroethane	I ND	l ND	ND ND	I ND	ND	l ND	I ND	l ND	i
Methylene chloride	200	ND	J ND	ND	19 J	13	I 6.6 J	1 15	i
Acetone) ND	420 J	I ND	150 J	ND	3 Jp	I ND	l lJp	i
Carbon Disulfide	ND	ND	J ND	ND I	, ND	I ND	I ND	I ND	i
1,1-Dichloroethene	I ND	ND	ND	l ND	l ND	I ND	I ND	i ND	i
1,1-Dichloroethane	ND	ND	ND .	ND	ND	ND	i ND i	I ND	i
1,2-Dichloroethene (total)	ם או	I ND	ND	ND I	ND	J ND	ND I	I ND	i
Chloroform	I ND	J ND	ND	ND I	ND.	ND 1	l ND	I ND	i
1,2-Dichloroethane	ND	j ND	ND I	ND i	ND	I ND	ו מא ו	i ND	i
2-Butanone	I ND	I ND	310 Jp	380 Jp	ND ND	I ND	I ND I	. ND	i
1,1,1-Trichloroethane	ND	ND	ND	ND (ND	ND I	ND I	I ND	i
Carbon tetrachloride	I ND	ND	ND	ND	ND	I ND	ND I	l ND	i
Vinyl Acetate	I ND	ND	ND I	ND (ND	ND 1	ו מא	ND	i
Bromodichloromethane	I ND	I ND	MD (ND I	ND	ND	ND I	ND ND	i
1,2-Dichloropropane	I ND	I ND	ND	ן מא	ND	ND	ND J	I ND	i
cis-1,3-Dichloropropene	I ND	ND	ן מא	ND j	ND	ND I	ND I	ND	i
Trichloroethene	I ND	I ND (ND (ND J	ND	ND I	ND I	ND	i
Dibromochloromethane	I ND	ND	ND	ND	ND	ND I	ND I	ND	i
1,1,2-Trichloroethane	ND	ן אס ן	ND	ND	ND j	ND I	ND I	ND	i
Benzene	I ND	i ND j	ND	ND	ND	ND I	ND I	ND	i
Trans-1,3-Dichloropropene	I ND	I ND I	ND	ND I	ND [ND	ND I	ND	i
Bromeform	j ND	l ND i	ND	ND	ND j	ND I	ND I	ND	i
4-Methy1-2-Pentanone) ND	I ND I	ND [ND I	ND	ND	ND I	ND	i
2-Hexanone	ND	I ND I	D	ND	ND [ND	ND I	ND	i
Tetrachloroethene	I ND	I ND I	ND	ND	ND	ND [ND j	ND	i
1,1,2,2-Tetrachloroethane] ND	ן מא ן	ND I	ND j	ND j	. ND j	ND I	ND	i
Toluene	I ND	I ND I	390 J	ND	ND	ND J	ND	ND	i
Chlorobenzene	ND	ן מא' ן	1800 l	ND	ND	ND j	ND I	ND	i
Ethylbenzene	I ND	ן מא ן	ND	ND	ND	ND į	ND j	ND	ì
Styrene	I ND	ן מא ן	, ND	ND j	ND	ND I	ND I	ND	i
Xylenes (total)	ND ND	I ND I	2300	3300	ND	ND (ND I	1 J	i
TOTAL TARGETED VOC ***	200	420	4490	3450	19	13	6.6	16	i
1,1,2-Trichloro-	1	1 1	ı	1	i	i	i		i
2,2,1-trifluoroethane	j 95	l ND l	ND	ND	14	ND	ND [ND	i
Total Octane	I ND	15000 J	ND	1000 J	ND I	ND j	ND j	ND	i
Cyclopentane	I ND	11000 J	730 J	ND	ND	ND j	ND I	ND	i
Cyclohexane	I ND	13000 J	4610 J	4200 J	ND	ND j	ND j	ND	i
Total Decane compounds	1 ND	19000 J	1000 J J	ND į	ND	ND j	ND I	ND	i
Benzene	ND	I ND I	4420 J	1860 J j	ND	ND j	ND I	ND	i
Total Other compounds	I ND	103000	ND	1710	18	ND j	ND	ND	i
Total Unknown compounds	I ND	ן מא	ND į	940 J	ND [NTD j	ND }	ND	i
TOTAL NON-TARGETED VOC ***	95	161000	10760	9710 J	32	ND į	ND I	ND	i
NOTES: J - Detected below	reporting	limit or is	an estim	ted concer	stretion	•	•	· -	•

NOTES: J - Detected below reporting limit or is an estimated concentration.

p - Compound also detected in laboratory method blank.

^{* -} TP-39 analytical results reported as TP-37 due to labelling error in the field.

^{** -} Analyzed by EPA Method 624 and reported in ug/l.

[&]quot;sa - Excludes compounds detected in method blank (p); includes compounds detected at trace concentrations (J).

L.E. CARPENTER, WHARTON, NEW JERSEY.

L.E. CARPENTER, (ug/kg)	WHARTON,	NEW JERSEY	•	FIELD *	• FIELD •	• TRTP ••		
SAMPLE ID:	I TP-46	1 TP-47	1 TP-48 # I				INAF	_
DATE SAMPLED:	4/4/89	1 4/4/89	4/5/89		BLANK	BLANK	BLANK	ı
·	•	1 6.0 -7.0			4/5/89	4/4/89	4/5/89	!
222422222222222222222222222222222222222		_	7.5 *6.0 ********		•	 : ========	·-	1
Chloromethane	j ND	I ND	I ND I	ND I	ND	, ND	ND	i
Bromomethane	ND ND	I ND	ן פא ן	ND	ON	ND	MD	ı
Vinyl chloride	† ND	I ND	i NED j	ND	ND ND	! ND	ND ND	i
Chloroethane	ND	ND I	ND I	ND	ND ND	j ND	j ND	ı
Methylene chloride	ND	ND ND	i ND i	13	4 Jp	15	1 7 p	ı
Acetone	I ND	1300 J	2300 B	3 Jp	ND	1 Jp	ND	ı
Carbon Disulfide	ND	I ND	I COM	MD	ND	ND	i ND	ı
1,1-Dichlorosthens	I ND	l ND	I ON	ND	ND	ND	I ND	i
1,1-Dichloroethane	ND	ן מא ן	ן מא ן	ND	ND	į ND	ND	ĺ
1,2-Dichloroethene (total)	I ND	ן מא ן	ן סא	ND (ND CM	j ND	j ND	i
Chloroform	I ND	l ND	ND (ND (ND	I ND	I ND	ı
1,2-Dichloroethene	I ND	ND	ND	ND	ND	ND	j ND	i
2-Butanone	200 Jp	ND	ND	ND	ND	I ND	I ND	ı
1,1,1-Trichloroethene	ND	i nd i	ן מא	ND	ND	I ND	I ND	l
Carbon tetrachloride	I ND	I ND I	ND	ND	ND	I ND	I ND	i
Vinyl Acetate	I ND	I ND (ן מא	ND	ND	I ND	NO	ı
Bromodichloromethane	ND ND	I ND	ND (ND (ND	ND	i ND	ı
1,2-Dichloropropene	I ND	ND	ן מא	ND	ND	ND	ND I	ı
cis-1,3-Dichloropropene	I ND	ND (ND	ND [ND	I ND	l ND	ı
Trichloroethene	I ND	ND	ND	ND	ND	l ND	I ND I	l
Dibromochloromethane	ן אס ן	MD	ND	ND	ND	I ND	ND j	1
1,1,2-Trichloroethane	I ND	ND J	ND 1	ND (ND	I ND	ND I	ŀ
Benzene	I ND [ND	ND j	ND J	ND	Į ND	l ND i	1
Trans-1,3-Dichloropropene	ND	ND	ND	ND j	ND	I ND	. ND I	ł
Bronoform	ND (ND	ND	ND	ND	l ND	I DE I	
4-Methy1-2-Pentanone	ND	ND I	ND ‡	ND	ND	ND I	. ND I	i
2-Hexanone	ND	ND (ND	ND j	ND	INDI	. ND I	,
Tetrachloroethene	ND	ND	ND	ND ;	ND	ND	,, I NID I	
1,1,2,2-Tetrachloroethane	ND	ND	ND	ND j	ND	i ND i	ND I	
Toluene	ן מא	ND j	ND	ND I	ND	I ND I	ND 1	
Chlorobenzene	ND	ND	ND (ND I	ND	NED I	ND I	
Ethylbenzene (ND	2100	ND į	ND I	ND	ND I	י יייי ו מא	
Styrene	ND	ND	ND (ND I	ND	ND 1	ו מא ו	
Xylenes (total)	420 J	6800	3200 p	ND j	ND	13	i ii ii ii	
TOTAL TARGETED VOC ***	420 j	10200	5500 #	13	ND	16		
Total Cyclopentane compound	ND i	3400 J [•	ND I	ND I	ND I	, ND	
Total Cyclohexane compounds	8300 J			ND I	ND I	ND I	ND 1	
		34300 J	ND	ND 1	ND I	ND I	ן מא	
	5000 J J	•	24700 J	ND I	158.1 J	•	116.5 J	
Total Other compounds	ND I	ND I	780 J	ND I	ND (ן כא ו ו מא ו	•	
TOTAL NON-TARGETED VOC ***	15400	65600	39680 #	ND I	158.1		ND	
•					1,0.1	MD	116.5	

 $[\]boldsymbol{p}$ - Compound also detected in laboratory method blank.

B - Compound also detected in method blank and sample is over 5 times method blank's.

^{# -} MJDEP Tier I sampling holding time exceeded. (Re-examined due to contamination of laboratory equipment.)

ND - Not detected.

^{** -} Analyzed by EPA Method 624 and reported in ug/l.

^{*** -} Excludes compounds detected in method blank (p); includes compounds detected at trace concentrations (J) & (B).

TABLE 7: SUMMARY OF VOLATILE ORGANICS ANALYTICAL TESTING - TEST PIT RESULTS BY EPA METHOD 8240+15

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L.E. CARPENTER, WHARTON, NEW JERSEY.

(ug/kg) SAMPLE ID:								FIELD *	• TRIP
	TP-50A	,	,				TP-54	BLANK	BLANK
DATE SAMPLED:		4/10/89				-	•	4/10/89	4/10/89
SAMPLE DEPTH (feet):	•	3.0 -3.5	0 - 0.5			2.5 -3.0	2.0 -2.5	•	
Chloromethane	, I ND	ND	I ND	I ND	! ND	I ND	ND	ND NO	ND
Sromomethane	ND	l ND	ND) ND	l ND	I ND	ND I	ND I	ND ND
/inyl chloride	Į ND	ND	I ND	I ND	J ND] ND	I ND	ND I	ND
hioroethane	[ND	ם או	I NO	j ND	I ND	J ND	ND.	ND I	CM
ethylene chloride	5 Jp	j 4 Jp	MD	ј 4 Јр	I ND	l ND	7 J	3 J	3 J
cetone	6 Jp	8 Jp	ND ND	8 Јр	I ND	ND	6 J	14 p	9 Jp
arbon Disulfide	ND	į ND	ND ND	ND	Į ND	I ND	ND	ND I	, , I ND
.,1-Dichloroethene	ND	ND	ND ND	I ND	מא	ND	ND I	ND I	ND
,1-Dichloroethane	ND	j ND	ND.	[ND	ND ND	ND	ND I	ND I	ND
,2-Dichloroethene (total)	I ND	ND .	I ND	[ND	I ND	ND	ND 1	ND I	ND
chloroform	ND	i ND	ND	J NO	. ND	I ND I	ND I	ND I	ND
,2-Dichloroethane	I ND	ND	ND	ND I	ND	I ND I	ND I	ND	ND
-Butanone	j ND	I ND	ND ND	ND !	I ND	I ND 1	ND I	13	ND
,1,1-Trichloroethane	i ND	I ND	ND ND	ND I	ON I	ND I	ו מא	ND I	ND
arbon tetrachloride	I ND	I ND	ND ND	I ND	ND :	ND I	ND I	ND I	ND
inyl Acetate	j ND	I ND	ND	ND I	ND I	INDI	ND I	ו מא	ND
romodichloromethane	[ND	I ND	ND	l ND i	ND I	ND I	ND I	ND I	ND
,2-Dichloropropane	j ND	I ND	ND	ND I	ND I	ND I	, CN I CDN	ND I	ND
is-1,3-Dichloropropene	I ND	i ND	ND	I ND i	ND I	ND I	ND I	ND I	ND
richloroethene	ND I	, ND	ND	ND I		ו כוא	ND I	ND I	ND ND
ibromochloromethene	[ND	i ND i	ND I	ND 1		ו CN ו	ND I	ו מא	ND D
,1,2-Trichloroethane	I ND	i ND i	ND ND	ND I	ND I	ו מא ו ו מא	ND i	ND I	ND
enzene	l ND	I ND I	ND	ND I		I CIN	ND I	ן כא ו מא	ND
rans-1,3-Dichloropropene	ND	ו פא	ND I	ND I		ND I	ND I	ND I	ND
romoform	I ND	I ND I	ND I	, 110 j		ND I	ND I	ND I	ND
-Methyl-2-Pentanone	I ND	I ND I	ND I			ו מא	ן מא	ו מא	עא בא
-Hexanone	ND	I ND i	ND I	ND I	ו מא	ו מא	ND 1	ND I	
etrachloroethene	I ND	l ND I	ND	NO I		ND I	ו מא	-	ND
,1,2,2-Tetrachloroethane	I ND	. ND I	ND I			ו מא	ן טוא	ND	ND
oluene	ND	l ND I	ND I	ו מא	ND 1	ן מא		ND I	ND
hlorobenzene	I ND	. ND I	NED 1	2 J I			ND	ND	ND
thylbenzene	I ND	ו מא ו	ו כוא	ZJ ND	5 3	ND	ND	ND	ND
tyrene	, ND	140 ND	ו מא		ND	ND I	ND [ן מא	ND
ylenes (total)	W	ן טא נ DND ו		ND I	ND	ND	ND	ן מא	ND
OTAL TARGETED VOC ***	JJ 3		ND	ND I	ND	ND [ND	ND [ND
AINT INUSTIED AND			ND	2	5	ND	13	4 [3
otal Unknown compounds	ND	l 19	!		ł	i	1	- 1	
•	ND	ND	ND ;	ND [ND	ND	ND [ן מא	3.2 J
OTAL NON-TARGETED VOC ***	ND	I ND I	ND [ND	ND	ND 1	ND [ND	3.2

p - Compound also detected in laboratory method blank.

ND - Not detected.

^{** -} Analyzed by EPA Method 624 and reported in ug/1.

^{*** -} Excludes compounds detected in method blank (p); includes compounds detected at trace concentrations (J).

TABLE 7: SUMMARY OF VOLATILE ORGANICS ANALYTICAL TESTING - TEST PIT RESULTS Page 12 of 16
BY EPA METHOD 8240+15

BY EPA METHOD 8	BY EPA METHOD 8240+15											
L.E. CARPENTER,	WHARTON,	NEW JERSE	Υ.		FIELD *	* TRIP **						
SAMPLE ID: (ug/kg)	TP-55	TP-56	TP-57	TP-58	BLANK	I BLANK I						
DATE SAMPLED:	4/7/89	4/7/89	4/7/89	4/7/89	4/7/89	4/7/89						
SAMPLE DEPTH (feet):	15.0 -5.5	5.0 -5.5	4.5 -5.0	5.0 -5.5	••							
				-								
Chloromethane	I ND	ND ND	ND	I ND	ND	I ND 1						
Bromomethane	ND	ND ND	, ND	ND	I ND	. ND I						
Vinyl chloride	ND	ND	ND	ND	ND	I ND I						
Chloroethane	I ND	I NO	ND	I ND	I ND I	ND I						
Methylene chloride	1 10 Jp	ND	8	I ND	. 8	5 1						
Acetone	j 210 p	ND	ND	ND	I ND i	ND I						
Carbon Disulfide	J ND .	ND	ND ND	ND ND	I ND I	 I ND I						
1,1-Dichloroethene	ND	ND	ND I	ND	ND I	ND I						
1,1-Dichloroethane	ND	ND	ND	ND	ND I	ND I						
1,2-Dichloroethene (total)	I ND	ND	ND	ND ND	ND I	ND j						
Chloroform	ND	ND	ND	ND I	ND !	ND I						
1,2-Dichloroethane	ND	ND	ND	ND	ND I	ND I						
2-Butanone	j ND j	420 Jp	ND	ND	ND I	ND I						
1,1,1-Trichloroethane	ND	ND	ND	ND	ND I	ND I						
Carbon tetrachloride	j ND j	ND	ND	ND	ND I	ND I						
Vinyl Acetate	ND	ND	ND	ND	ND I	ND I						
Bromodichloromethane	ND	ND	ND	ND	ND I	ND i						
1,2-Dichloropropane	ND I	ND J	ND	ND 1	ND j	ND I						
cis-1,3-Dichloropropene	ND	ND [ND [ND J	ND 1	ND 1						
Trichloroethene	ND [ND	ND	ND į	ND J	ND j						
Dibromochloromethane	ND j	ND I	ND	ND	ND !	ND j						
1,1,2-Trichloroethane	ND	ND	ND J	ND j	ND j	ND j						
Benzene	I DN I	ND	ן מא	ND	ND	ND I						
Trans-1,3-Dichloropropene	ND I	ND	ND	ND	ND	ND j						
Bromoform	ND [ND 1	ND 1	ND	ND	ND 1						
4-Methyl-2-Pentanone	ND	ND	ND	ND	ND	ND j						
2-Hexanone	ן מא	ND	ND į	ND	ND	ND ;						
Tetrachloroethene	ND	ND 1	ND	ND	ND j	ND I						
1,1,2,2-Tetrachloroethane	ND	ND J	ND	ND	ND	ND j						
Toluene	ND 1	ND	ND j	ND į	ND	ND						
Chlorobenzene	ND [ND	ND	ND	ND j	ND						
Ethylbenzene j	ND	ND j	ND	ND	ND J	ND						
Styrene	ND	ND [ND	ND	ND j	ND j						
Xylenes (total)	ND J	ND I	ND	ND	ND I	ND						
TOTAL TARGETED VOC ***	ND j	ן מא	8	ND	8	5						
1,1,2-Trichloro-	1	1	í	1	Í	ì						
2,2,1-trifluoroethane	ND	ND	ND j	ND	ND	ND į						
Butanoic Acid	51 J	ND	ND	ND	ND 1	I DN						
2,4-Dimethyl-3-Pentanone	200 J	5800 J	ND	ND [ND j	ND						
Total Decame	185 J	ND I	ND 1	ND į	ND I	ND I						
Total Benzene	51 J	ND	ND j	ND	ND I	ND I						
Total Other compounds	147 J	2400 J	24 J	ND I	ND I	ND I						
Total Unknown compounds	ND [ND	932 J	14.8 J	ND 1	ND I						
TOTAL NON-TARGETED VOC ***	635	8200	956	14.8	ND j	ND						

p - Compound also detected in laboratory method blank.

^{** -} Analyzed by EPA Method 624 and reported in ug/l.

^{*** -} Excludes compounds detected in method blank (p).

Includes compounds detected at trace concentrations (J).

TABLE 7: SUMMARY OF VOLATILE ORGANICS ANALYTICAL TESTING - TEST PIT RESULTS
BY EPA METHOD 8240+15

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BY EPA METHOD 8	240+15						_			
. L.E. CARPENTER,	WHARTON,	NEW JERSE	٧.				FIELD *	• FIELD •	• TRIP ••	TRIP **
SAMPLE ID: (ug/kg)	TP-59	TP-60	TP-61	TP-62	TP-63 #	TP-64 #	BLANK	BLANK	BLANK	BLANK 1
DATE SAMPLED:	4/7/89	4/7/89	4/7/89	4/7/89	4/5/89	4/5/89	4/5/89	4/7/89	4/5/89	4/7/89
SAMPLE DEPTH (feet):	14.5 -5.0	4.5 -5.0	4.5 -5.0	5.5 -6.0	7.5 -8.0	8.5 -9.0				1
		+			******	_	· 	-		
Chloromethane	i ND	םא ן	ND	I ND	, ND	ND	ם אם	, ND	ו מא ו	ND I
Bromomethene	ND	Í ND	ND	I ND	J ND	ND	[ND	I ND	ND	ND
Vinyl chloride	ND	ם או	ND ND	j ND	I ND 1	ND	ND I	I ND	ND 1	ND
Chloroethane	I ND	, ND	ND ND	[ND	I ND	ND ON	i ND	ON	I ND I	ND I
Methylene chloride	ND	I ND	ND	8	5 Jt	4 Jt	j 4 Jp	8	7 p	5 1
Acetone	1 25 JB] 180 Jp	2800 B	I ND	22 p	26 p	I ND	ND.	ן מא	ND I
Carbon Disulfide	ND] ND	ND	ND ND	ND	ND ND	ND .	ND	I ND I	ND I
1,1-Dichloroethene	ND	םא ן	ND.	j ND	ND I	ND	ND ND	I ND	ND I	ND I
I,1-Dichloroethane	ND	I ND	ND	ND ND	ND	, ND	ND.	DND	ND E	ND I
1,2-Dichloroethene (total)	I ND	ND	ND	l ND	ND I	ŅĎ	I ND	ND	ND I	ND I
Chloroform	l ND	į ND	NO	, ND	ן אס	ND	I ND	I ND	י מא ן ו מא	ND j
1,2-Dichloroethane	, ND	l NO	ם א	I ND	, ND	ND .	, ND	ND	ND	ND I
2-Butanone	I ND	380 Jp	250 Jp	I NO	, ND ,	ND '	I ND	ND	I DN I	NO i
1,1,1-Trichloroethane	ND	ND ND	ND ND	l ND	ו מא	ND	I ND	. אם	I ND I	ND I
Carbon tetrachloride	j ND	Į ND	ND	I ND	ND	ND ND	I ND	ND	. ND I	ND I
Vinyl Acetate	, ND	l ND	ND ND	I ND	I ND I	ND	. ND	. ND	. ND I	ND I
Bromodichloromethane	I ND	I ND	ND I	I ND	I ND I	ND ND	I ND	. ND		ND I
1,2-Dichloropropane] ND	ND	ND	, ND	I ND 1	ND ND	I ND :	ND ND	ND I	ND I
cis-1,3-Dichloropropene	I ND	ND ND	ND	I ND	I ND i	D	I ND I	ND	ND I	ND I
Trichloroethene	I ND	I ND	ND	I ND	I ND I	מא	ND	ND	I ND I	ND I
Dibromochloromethane	J ND	I ND	I ND	I ND	l ND	ND	I ND	ND ND	I ND I	ND I
1,1,2-Trichloroethane	ND	l ND	ND ND	ND	l ND I	ND	I ND	ND ND	I ND I	ND 1
Benzene	ND ND	I ND	I ND	i ND	. ND I	ND ND	I ND	ND	ND I	ND I
Trans-1,3-Dichloropropene	I ND	I ND	ND	l ND	i ND i	ND	I ND	ND I	i ND i	ND I
Bromoform	J ND	I ND	I ND	I ND	i ND I	ND I	ND I	ND	I ND I	ND I
4-Methy1-2-Pentanone	I ND	ND	I ND	I ND	I ND I	ND	ND ND	ND	I ND 1	ND I
2-Hexanone	ND	i ND	I ND	ND ND	i ND i	I ND	ND I	ND I	I ND I	, CN
Tetrachloroethene	I ND	J ND	ND	I ND	1 6 1	3 J	ND I	ND !	I ND I	, ON
1,1,2,2-Tetrachloroethane	I ND	I ND	ND	l ND	I ON I	I ND	I ND I	, ND :	, אם, ו מוא ו	ן טא.
Toluene	i ND	1 350 J	ND ND	I ND	1 2 J	I ND	I ND I	ND I	ND I	ND I
Chlorobenzene	I ND	i ND	ND	I ND	i LO I	ND .	I ND I	ND I	ND I	ND I
Ethylbenzene	I ND	I ND	l ND	I ND	i ND i	ND ND	i ND i	ND I		ן טא
Styrene	I ND	I ND	I ND	ו אם	i ND i	ND ND	I ND I	I ND I	, ND I	ן טא ו מא
Xylenes (total)	I ND	1 350 J	מא ו	ו אם	14Jp	ND	I ND I	ND I	i ND i	ן כוא ו כוא
TOTAL TARGETED VOC ***	1 25	1 700	1 2800	1 8	i 40p i	, NO 3.4	ן לוא ו ו לוא ו	ן שא	ן אט ן ו מא ו	RU [
		1	<u></u>	, ,	1) 7	ן עוא	• •	l was t	, ,
2.4-Dimethyl-3-Pentanone	33 J	3800 J	l 2900 J	i Mh	i MP	l No i	l 16 1		1	
2,3,4-Trimethyl-Hexane	34 J	1 ND	2900 J ND	l ND	ND I	ND	I ND I	ND	ND 1	ND I
Total Decanal	32 Jp	ם או		ם אם	ND I	ND	ND	ND (ND I	ND
Total Benzene	1 ND		l ND I ND	ND	ND	ND I	ND	ND [ND [ND J
Total Other compounds	1 41 J	NU 4300 J		14.6 J		ND	ND [ND	ND I	ND 1
Total Unknown	•	•		21.5 J		ND	ND [ND (ND I	ND
TOTAL NON-TARGETED VOC ***	I ND	ND ND	l ND	27 J		ND	158.1 J		116.5 J	ND į
ININE HOM-INNEELED AND	108	8100	2900	63.10	ND #	ND#	158.1	ND	116.5	ND

t - Compound also detected in trip blank. Value negated as per NJDEP QAS directive.

p - Compound also detected in laboratory method blank.

B - Compound also detected in method blank and sample concentration is over 5 times the method blank's.

^{# -} Re-examined due to contamination of laboratory equipment. NJDEP Tier I sample holding time was exceeded.

^{** -} Analyzed by EPA Method 624 and reported in ug/1.

^{*** -} Excludes compounds detected in blanks (p) and (t); includes compounds detected at trace concentrations (J) and (B).

TABLE 7: SUMMARY OF VOLATILE ORGANICS ANALYTICAL TESTING - TEST PIT RESULTS BY EPA METHOD 8240+15

L.E. CARPENTER, WHARTON, NEW JERSEY.

SAMPLE ID: (ug/kg)	ITD_48 A	1 TD 66 A	TD 47 4				FIELD **	FIELD **	TRIP **	TRIP	**
DATE SAMPLED:	1 4/5/89	TP-66 #	-		TP-69	1 11-70 1	BLANK	BLANK	BLANK	BLANK	ı
SAMPLE DEPTH (feet):			4/5/89 3.0 -3.5			4/4/89 7.5 -8.0		4/5/89	4/4/89	4/5/6	9
		7.5 -0.0	J.U -J.J =====	/.3 -0.U 	J.J -6.U	/.5 -8.0 	!	[••		1
Chloromethane	I ND	i ND	ND ND	ND ND	l ND	ND 	ND 1				==
Bromomethane	I ND	I ND	I ND I	I ND	ND	ן טא ן ! DN !	I DN	ND (ND (I ND	ŀ
Vinyl chloride	I ND	I ND	ND I	I ND	I ND	ן אם ן ו DN ו	ND 1	ND j	ND (ND	!
Chloroethane	, ND	I ND	ND I	ND I	I ND	ו פא ו	ן מא	ND I	ND I	ND ND	1
Methylene chloride	3 J	[5 J]	15000 J		7	1.0 2J	13	4 Jp	ND [ND 7	
Acetone	26 p	20 p	86000	12 p	12 Jp (6 Jp I	3 Jp	MD I	15 J	7 p	!
Carbon Disulfide	ND	I ND I	ND I	I DI	ND I	ND I	ND I	ND I	1 Jp	ND	!
1,1-Dichloroethene	ND	ו מא ו	ND 1	ND I	ND I	ND 1	ND I	ND I	I DN	ND	!
1,1-Dichloroethane	ND	I ND I	ו מא	ND I	ND I	ND I	ND I	ND I	ND 1	ND	1
1,2-Dichloroethene (total)	ND	I ND 1	ND I	ND I	ND I	ND 1	ND I	ו מא	ND I	ND	ŀ
Chloroform	ND	l ND I	ND I	ND I	ND I	ND I	ND I	ן מא	ND 1	ND	!
1,2-Dichloroethane	ND	I ND I	ND I	ND I	ND I	ND I	ND I	ו מא	ND 1	ND	ŀ
2-Butanone	I ND	13	95000 1	ND I	ND 1	ND I	ND i	ND I	•	ND	ſ
1,1,1-Trichloroethane	j ND	ND	ND I	ND I	ו מא	ו מא	ND I	ו מא	i DN	ND	!
Carbon tetrachloride	I ND	ND I	ND 1	ND I	ND I	ND I	ND 1	ND I	ND I	ND	!
Vinyl Acetate	I ND	I ND i	ND I	ND I	ND I	ND I	ND I	ND I	ND 1	ND	
Bromodichloromethane	I ND	ו מא	ND 1	ND I	ND 1	ND 1	ND 1	ND I	ND I	ND	!
1,2-Dichloropropane	J ND	I ND I	ND I	ND I	ND I	ND I	ND I	ND I	ND 1	ND ND	!
cis-1,3-Dichloropropene	ND	י מא ו ו מא	ND I	ND I	ND I	ND i	ו מא	ND I	ו מא	ND ND	!
Trichloroethene	J ND	ND j	ND I	ND I	ND I	ND I	ND I	ND 1	ND 1	ND	ı
Dibromochloromethane	ND	ND j	ND 1	ND I	ND 1	ND i	ND I	ND I	, פא ו פא	ND	ı
1,1,2-Trichloroethane	I ND j	ND I	ND j	ND I	ND :	ND 1	ND !	ND I	ו מא	ND	1
Benzene	j ND j	ND I	ND I	ND I	ND I	ND 1	ND I	ND I	ND I	ND	!
Trans-1,3-Dichloropropene	I ND I	ND [ND 1	ND I	ND 1	ND I	ND I	ND I	ND I	ND	!
Bromoform	MD 1	ND j	ND I	ND I	ND I	ND I	ND I	ND I	ND I	ND	!
4-Methy1-2-Pentanone	ND j	ND I	ND	ND I	ND I	ND I	ND ;	ND I	ND 1	ND	•
2-Hexanone	ND	ND	ND I	ND I	ND 1	ND I	ND I	ND I	ND I	ND	!
Tetrachloroethene	ND I	ND I	ND 1	ND I	ND I	ND I	ND I	ND I	ND I		
1,1,2,2-Tetrachloroethane	ND I	ND	ND I	ND I	ND I	ND I	ND I	ND I	ND I	ND	!
Taluene	ND I	ND 1	ND I	ND I	ND I	ND I	ND I	ו מא	ND 1	ND	!
Chlorobenzene	ND	ND I	ND I	ND I	13	ND I	ND I	ND I	ו מא	ND ND	!
Ethylbenzene	ND j	ND j	390000	ND i	ND I	ND 1	ו מא	ND I	ו מא	ND ND	!
Styrene	ND	ND j	ND I	ND I	ND I	ND I	ND I	ND I	ND 1	ND ND	!
Xylenes (total)	ND j	2 Jp	1200000	ND I	ND I	ND 1	ND I	ND i	1 J I	NID NID	!
TOTAL TARGETED VOC ***	3 # 1	6 # 1	1786000#1	1	8 1	2 1	13	ND 1	16		ı
	i	· · ·	1	- :	- 1	- !	1	WD 1	10	ND	!
Total Cyclooctane compounds	ND	ND I	ND [19 J	ND I	ND (ND j	ND j	I I	Ath	!
Total Cyclopentane compound	ND	ND Î	ND I	12 J	ND 1	ND I	ND	ND I	ND I	ND	!
Total Decane compounds	ND j	ND i	ND !	12 J	ND I	ND ;	ND I	•	ND 1	ND	!
Total Naphthalene compounds	ND I	ND I	ND I	27 J	ND i	ND I	•	ND I	ND I	ND	ı
Total Cyclohexane compounds	ND ;	ND 1	ND I	20 J	ו מא	ND ;	ND	ND I	ND I	ND	!
Total Unknown compounds	ND I	ND I	ND I	ND I	ND 1	•	ND	ND	ND	ND	i
Total Other compounds	ND I	ND 1	ND	91 J (ND I	ND [ND j	158 J	ND	117 3	1
TOTAL NON-TARGETED VOC ***	ND #	ND # I	ND # 1	181	ND I	ND	ND	ND	ND j	ND	1
•	- ,		+ 1		ן עווי	ND	ND [158	ND į	117	ſ

NOTES: J - Detected below reporting limit or is an estimated concentration.

p - Compound also detected in laboratory method blank.

B - Compound also detected in method blank and sample concentration is over 5 times the method blank's.

^{# -} Re-examined due to contamination of laboratory equipment. NJDEP Tier I sample holding time was exceeded.

^{** -} Analyzed by EPA Method 624 and reported in ug/l.

^{*** -} Excludes compounds detected in method blank (p); includes compounds detected at trace concentrations (J) and (8).

TABLE 7: SUMMARY OF VOLATILE ORGANICS ANALYTICAL TESTING - TEST PIT RESULTS
89 PPA METHOD 8240-15

L.E. CARPENTER, WHARTON, NEW JERSEY. FIELD ** FIELD ** TRIP ** |TP-71 # | TP-72 | TP-73 | TP-74 | TP-75 # | SAMPLE ID: (ug/kg) BLANK BLANK | BLANK | BLANK I | 4/5/89 | 4/10/89 | 4/10/89 | 4/10/89 | 4/5/89 | DATE SAMPLED: 4/5/89 | 4/10/89 | 4/5/89 | 4/10/89 | |5.0 -5.5| 6.0 -6.5| 7.5 -8.0| 6.5 -7.0| 7.5 -8.0| SAMPLE DEPTH (feet): Chloromethane ND ND ND ND ND ND ND ND NĐ ١ 1 Brozomethane ND ND ND ND ND ND ND ND ND Vinyl chloride ND ND ND ND ND ΝĐ ND ND ND Chloroethane ND ND ND ND ND ND ND ND ND Methylene chloride 5 J 3 Jp 1 Jp ND 9 4 Jp 3 J 7 p 3 J Acetone 26 p 79 p 8 Jp 20000 JB1 24 p ND 14 p ND 9 Jp Carbon Disulfide ND ND ND ND ND ND ND ND 1,1-Dichloroethene ND ND ND ND ND ND MD ND ND 1.1-Dichloroethane ND ND ND ND ND ND ND NO ND 1.2-Dichloroethene (total)| ND ND ND ND ND ND ND ND ND ı Chloroform NΩ ND NO ND ND ND ND ND 1 ł 1.2-Dichloroethane ND ND ND ND ND ND ND NØ ND ı 2-Butanone 2 J 21 ND ND 1 J ND 1 J ND 1 ND 1,1,1-Trichloroethane ND ND ND 1 ND ND ND ND ND ND Carbon tetrachloride ND ND ND ND ND ND ND ND ND Vinyl Acetate ND ΝĎ ND ND ND ND ND ND **Bromodichloromethane** ND ND ND NĎ ND ND ND 1,2-Dichloropropane ND ND ND ND ND ND ND ND cis-1,3-Dichloropropene ND ND ND ND ND ND ND ND ND Trichloroethene ND ND ND ND ND ND ND ı ND Dibromochloromethane ND ND ND ND ND ND ND NΠ ND 1,1,2-Trichloroethane ND ND ND ND ND ND ND ND 1 ı 1 ND Benzene ND ND ND ND ND ND ND ND ND 1 1 ١ Trans-1,3-Dichloropropene ND ND ND ND ND ND ND ND ND 1 ł Bromoform ND ND ND ND ND ND ND 1 ND 4-Methyl-2-Pentanone ND ND ND ND ND ND ND ND ND 2-Hexanone ND ND ND ND ND ND ND ND Tetrachloroethene ND ND ND ND ND ND ND ND ND 1,1,2,2-Tetrachloroethane | ND ND ND ND ND ND ND ı ND ND 1 Toluene ND ND ND ND ND ND ND ND ı Chlorobenzene ND ND ND ND ND ND ND ND NΠ Ethylbenzene ND ND ND 70000 1 J ND ND ND ND Styrene ND ND ND ND ND ND ND ND ı Xylenes (total) 10 290000 | 3 Jp ND ND ND ND 1 TOTAL TARGETED VOC *** 31 1 380000 I 11 # ND 4 ND 3 1 Total Cyclohexane compound! ND ND ND 1 57000 J I ND ND ND ND ND Total Octane compounds ND ND 1 ND | 1830003 | ND ND ND ND ND 1 Total Heptane compounds ND ND 1 22000 J I NΠ ND ND ND MΠ Total Decane compounds ND ND ND | 94000 J | ND ND ND ND ND Total Butanoic Acid ND ND ND | 21000 J | ND ND ND Total Other compounds NΩ ND | 52000 J | ND ND ND ND 3.2 J Total Unknown compounds ND ND ND 1 74000 J I ND 158 J NΩ 117 J ND TOTAL NON-TARGETED VOC ***| ND # ; ND ND 503000 1 ND # 158 ND 117 3.2

NOTES: J - Detected below reporting limit or is an estimated concentration.

p - Compound also detected in laboratory method blank.

B - Compound also detected in method blank and sample concentration is over 5 times the method blank's.

^{# -} Re-examined due to contamination of laboratory equipment. NJDEP Tier I sample holding time was exceeded.

^{** -} Analyzed by EPA Method 624 and reported in ug/l.

^{*** -} Excludes compounds detected in method blank (p); includes compounds detected at trace concentrations (J) & (B).

BY EPA METHOD 8240+15

L.E. CARPENTER, WHARTON, NEW JERSEY.

(ug/kg)					FIELD	** FIELD	** TRIP *	TRIP *
SAMPLE ID:	TP-76	TP-77	TP-78	TP-79	BLANK	BLANK	BLANK	BLANK
DATE SAMPLED:	4/10/89	4/7/89		,		4/10/89	4/7/89	4/10/89
SAMPLE DEPTH (feet):		6.0 -6.5						!
Chloromethane	ND	ND	ND ND	ם א	ND	ND	l ND	ND ND
Bromomethane	ם א	I ND	ND ND	l ND I	ND	I ND	l ND	ND I
Viṇyl chloride) ND	l ND	DN	ן פא	ND	J ND	l ND	ND I
Chloroethane	Į ND	Į ND	l ND	MD	ND	ND ND	J ND i	ND I
Methylene chloride	6 Jp	3 Jp	3 J	j ND j	8	3 J	5	3 J J
Acetone	8 Jp	6 Jp	ND	ND	ND	14 p	I ND I	9 Jp
Carbon Disulfide	I ND	ND	ND ND	ND 1	ND	I ND	I ND I	ND 1
1,1-Dichloroethene) ND	ND	ND CM	ND I	ND	I ND	ND I	ND I
l,1-Dichloroethane	I ND	ND.	ND	ND I	ND	J ND	ND I	ND 1
1,2-Dichloroethene (total)	I ND	ND	ND ND	DN	ND	I ND	ND I	ND I
Chloroform	I ND I	ND	ND	ND I	ND	. ND	i NED I	ND I
1,2-Dichloroethane	I ND	ND	ND	ND I	ND	l ND	ND I	ND I
2-Butanone	J ND (ND	ND I	ND 1	ND	 	ND I	ND 1
1,1,1-Trichloroethane	i ND	ND I	ND	ND I	ND	, _ ; I ND I	ו מא	ND I
Carbon tetrachloride	ND 1	ND I	ND I	ND i	ND	ND 1	ND I	ן כוא ו מא
inyl Acetate	I ND I	ND I	ND I	ND I	ND I	 ND	ND 1	ND I
iromodichloromethane	ן מא ן	ND I	ND I	ND i	ND I	i ND i	ND I	ND 1
,2-Dichloropropane	ND	ND I	ND I	ND I	ND 1	ND I	ו מא	ND I
is-1,3-Dichloropropene	I ND I	ND I	ND I	ND I	ND I	, 110 (ND (ן כבא ו כבא	ND I
richloroethene	I ND I	ND I	ND I	ND I	ND I	ו כבא ו	ND I	ו מא
)ibromochloromethane	l ND i	ND I	ND I	ND I	ו מא	ו מא ו	ND 1	ו מא
l,1,2-Trichloroethane	I ND I	ND I	ND I	ND 1	ND 1	ו לא ו ו לוא ו	ND 1	ND I
Benzene	l ND I	ND I	ND I	ND I	ND I	ND I	ן כא 1 מא	ND I
rans-1,3-Dichloropropene	I ND I	ND I	ו מא	ND I	ND :	ND 1	ו מא	ND I
Bronoform	 I ND I	ND I	ND I	ND 1	ND I	ND 1	ו מא	
-Methyl-2-Pentanone	INDI	ND I	ND 1	ND I	ND 1	ו מא		ND [
-Hexanone	I ND I	ND I	ND I	ו מא	ND I		ND	ND
etrachloroethene	I ND I	ND I	ND I	ן טא	ND 1	ND I	ND I	ND [
,1,2,2-Tetrachloroethane	i ND I	ND I	ND I	ND I	ND I	ND I	ND [ND I
oluene	l ND i	ND I	ND I	ND i		ND I	ND [ND
hlorobenzene	ו כא ו ו מא ו	ND I	ND I		ND	ND [ND	ן מא
thvlbenzene	ו כאו	ND 1		ND I	ND I	ND į	ND 1	ND I
tyrene			ND I	ND I	ND	ND	ND	ND
ylenes (total) 9	i ND i	ND	ND [ND [ND	ND	ND [ND
OTAL TARGETED VOC ***	•	ND 1	ND	ND I	ND [ND 1	ND	ND
AINE INUMEIER ARC	ן מא	ND	3	ND	8	4	5	3
atal Other compands		!	1	I	ı	1	1	1
otal Other compounds	I ND I	ND	ND	ND	ן מא	ן מא	ND į	3.2 J
OTAL NON-TARGETED VOC	ND I	ND	ND [ND į	ND	ND	ND	3.2

p - Compound also detected in laboratory method blank.

ND - Not detected.

^{** -} Analyzed by EPA Method 624 and reported in ug/l.

^{*** -} Excludes compounds detected in method blank (p); includes compounds detected at trace concentrations (J).

TABLE 8

SUMMARY OF BASE NEUTRAL ANALYTICAL TESTING - TEST PIT RESULTS

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TABLE 8: SUMMARY OF BASE NEUTRAL ANALYTICAL TESTING - TEST PIT RESULTS BY EPA METHOD 8270+15
L.E. CARPENTER, WHARTON, NEW JERSEY.

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				Page 1	0!	15
CAMBLE ID:			FIELD .	•		
SAMPLE ID:	; TP-1A *	TP-18 *	BLANK	:		
DATE SAMPLED:	8/3/89	8/3/89	8/3/89	i		
SAMPLE DEPTH (feet):	0 - 0.5	4.0 - 5.0		!		
		, 4.0 - 5.0	<u> </u>	•		
PARAMETER				i		
	į	i	}	:		
(ug/kg)	1	!	!	į.		
	i	1		1		
bis(2-Chloroethyl)ether	. ND			į		
		ND	ND	;		
1.3-Dichlorobenzene	ND .	ND :	ND	i		
1.4-Dichtorobenzene	. ND	ND	ND	;		
1.2-Dichiorobenzene	ND			!		
bis(2-Chloroisopropyl)ether		ND	ND	i		
Dista-cultotsopropy lather	ND .	ND :	ND	:		
N-Nitroso-di-n-propylamine	. ND	ND !	ND .	į.		
Hexachloroethane	. ND	ND .	ND	į		
Nitrobenzene	ND	ND	ND	!		
Isophorone				į		
	ND .	ND ;	ND :	:		
bis(2-Chloroethoxy)methane	ND '	ND :	ND :	!		
1.2.4-Trichlorobenzene	! ND !	ND :	ND :	i		
Naphthalene	ND	ND	ND	1		
Hexachiorobutadiene				!		
Homosh London Language	ND	ND ;	ND ;	1		
Hexachlorocyclopentadiene	ND ;	ND ;	ND :	!		
2-Chioronapthaiene	ND :	ND :	ND :			
Dimethyl phthalate	ND	ND	ND			
Acenaphthylene	ND	ND :				
Acenaphthene			ND :			
	ND	ND	ND ;			
2.4-Dinitrotoluene	ND ;	ND ;	ND :			
2.6-Dinitrotoluene	. DO !	ND !	ND			
Diethyl phthalate	ND	ND :	ND			
4-Chlorophenyi phenyi ether	ND					
Fluorene		ND	ND			
N-Mi Assessing	ND ;	ND ;	ND ;			
N-Nitrosodiphenylamine	ND :	ND :	ND :			
4-Bromophenyl phenyl ether	ND !	ND :	ND :			
Hexach lorobenzene	ND	ND	ND :			
Phenanthrene	ND					
Anthracene		ND :	ND			
	ND	ND ;	ND :			
Di-n-butyl phthalate	ND ;	ND !	ND !			
Fluoranthene	ND !	47 J	ND :			
Pyrene	ND :	50 4	ND			
Butyl benzyl phthalate	ND !	ND .				
3.3 -Dichlorobenzidine			ND			
Boons (a) and the same and the	ND ;	ND	ND :			
Benzo(a)anthracene	ND ;	ND :	ND !			
bis(2-Ethylhexy@)phthalate	400 p*	680 p*	ND :			
Chrysene	ND	ND	ND :			
Di-n-octyl phthalate	ND	ND :				
Benzo(b)fluoranthene			ND ;			
	ND :	50 JL ;	ND ;			
Benzo(k) I luoranthene	ND ;	50 JL ;	ND ;			
Benzo(a)pyrene	ND :	ND	ND			
Indeno(1,2,3-c,d)pyrene	ND	NĎ !	ND !			
Dibenzo(a,h)anthracene	ND :	ND :	ND !			
Benzo(g,h,i)perylene						
	ND ;	ND	ND ;			
TOTAL TARGETED GAGE MENERALS	;		:			
TOTAL TARGETED BASE NEUTRALS ***	ND ;	147	ND :			
·		,	,			
•						
	i	į.	;			
NON-TARGETER DAGE NEUTOA: -	;	:	!			
NON-TARGETED BASE NEUTRALS	:	•	į			
Total Benzeneacetic acid	ND :	230	ND :			
Total Benzene compounds	ND	200				
Total Steroid compounds			ND :			
Total Alkane compounds	ND :	250	ND ;			
Total Alkana asmanada	ND	540	ND :			
Total Alkene compounds	ND ;	2970	ND :			
Total Other compounds	ND :	2140	ND :			
Total Unknown compounds	650	1910				
	1	1010	ND :			
TOTAL NON-TARGETED BASE NEUTRALS	!					
TOTAL MONTH INNOCICU DASE NEUTRALS;	650 ;	8240	ND			
		•				

```
NOTES: J - Detected below reporting limit or is an estimated concentration.

p - Compound also detected in laboratory method blank.

p* - Compound also detected in laboratory method blank at a concentration of 3 to 5 times the CRDL. Based on NJDEP Tier I guidelines, this vatue is qualified and the associated method blank value is rejected.

L - These compounds are not separable using this method and are therefore quantified together.

ND - Not detected.

* - Sample obtained by soil boring at MW-13 location.

* - Analyzed by EPA Method 625 and reported in ug/I.

Excludes compounds detected in laboratory method blank (p), includes compounds detected at trace concentrations (J), and includes one of the two compounds that have been quantified together (L).
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E.E. Onn circuit, months		•••						FIELD**
SAMPLE ID:	! TP-2A	TP-28	! TP-3A !	TP-38	TP-4A	TP-48	BLANK	BLANK
DATE SAMPLED:	13/23/89	3/23/89	3/22/89	3/22/89	3/22/89	3/22/89	3/22/89	3/23/89
SAMPLE DEPTH (feet):	0 - 0.5	1.7	0 - 0.5	4.5 - 5	0 - 0.5	4.5 - 5		
PARAMETER	1	1	!	! !		!	!	!
(ug/kg)	1	}	1	1				1
(49/49)	1	;	;	1		}	:	
him (A. Ah) a canhail bakhar	. ND	ND	ND	ND	ND	ND	ND	ND.
bis(2-Chloroethyl)ether	ND	ND	ND	ND	ND	ND	ND	ND
1.3-Dichlorobenzene	ND	. ND	ND	ND	ND	ND	ND	ND
1.4-Dichlorobenzene	I ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	ND	ND ND	ND ND	ND I	ND	ND	ND	ND ND
bia(2-Chloroisopropyi)ether	ND	ND ND	ND	ND I	ND DN	מא	מא	ND
N-Nitroso-di-n-propylamine	ND ND	ND ND	ND	ND I	ND ND	ND ND	ND	ND ND
Hexachloroethane	ND	ND ND	ND I	ND ND	ND	ND	ND	ND
Nitrobenzene	ND	ND ND	ND ND	ND ND	ND	ND	ND	ND
sophorone		ND	ND	ND ND	ND	ND	ND	ND
bis(2-Chloroethoxy)methane	ND ND	UND CDA	ND ND	ND ND	ND DN	ND CIN	ND ND	ND
1,2,4-Trichlorobenzene					ND ND	ND ND	ND ND	ND ND
Naphthalene	ND	ND ND	ND	ND	ND ND	DA DA	ND ND	ND D
Hexachlorobutadiene	ND	ND	ND	ND			ND ND	ND.
HexachTorocyclopentadiene	ND	ND	ND	ND	ND	ND ND	ND ND	ND ND
2-Chioronapthalene	ND	ND	ND	ND	ND			
Dimethyl phthalate	ND	ND	ND	ND	ND	ND	ND	ND
Acenaphthylene	ND	ND	ND	ND	ND	ND	ND	ND
Acenaphthene	ND	NO	ND	ND	ND	ND	ND	ND
2,4-Dinitrotoluene	ND	ND ND	ND	ND	ND	ND	ND	ND
2,6-Dinitrotoluene	ND	ND	ND	ND	ND	ND	ND	ND
Diethyl phthalate	ND	ND	ND	ND	ND	2700 J	ND	ND
4-Chlorophenyl phenyl ether	, ND	ND	ND	ND	ND	ND	ND	ND
Fluorene	; ND	H ND	ND	ND	ND	ND	ND	ND
N-Nitrosodiphenylamine .	, ND	, ND	! ND	ND	ND	ND	ND	ND
4-Bromophenyl phenyl ether	, ND	, ND	, ND	, ND	ND	ND	ND	ND
Hexachiorobenzene	; ND	, ND	, ND	ND	ND	ND	ND	ND
Phenanthrene	¦ 560 J	, ND	ND	, ND	ND	ND	ND	ND
Anthracene	; ND	ND	ND	, ND	ND	ND	ND	ND
Di-n-butyl phthalate	, ND	, ND	3000 JB	4900 JB		(8800 JB		ND
Fluoranthene	1200 J	, ND	, ND	; ND	ND	ND	ND	ND
Pyrene	1200 J	ND	ND	ND	ND	, ND	ND	ND
Butyi benzyi phthalate	, ND	ND	; ND	, ND	ND	ND	ND	ND
3,3°-Dichiorobenzidine	, ND	. ND	, ND	; ND	ND	ND	ND	ND
Benzo(a)anthracene	, ND	ND	ND	; ND	ND	ND	, ND	ND
bis(2-Ethylhexyl)phthalate	13000	440000	34800	96000	57000	200000	ND	ND
Chrysene	680 J	ND	ND	, ND	ND	ND	ND	ND
Di-n-octyl phthalate	, ND	, ND	, ND	, ND	, ND	ND	ND	ND
Benzo(b) fluoranthene	, ND	ND	, ND	ND	, ND	ND	, ND	ND
Benzo(k)fluoranthene	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(a)pyrene	ND	ND	ND	ND	ND	ND	ND	ND
Indeno(1,2,3-c,d)pyrene	ND	ND	ND	ND	ND	ND	ND	ND
Dibenzo(a,h)anthracene	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(g,h,i)perylana	ND	ND	ND	ND	ND	ND	ND	ND
TOTAL TARGETED BASE NEUTRALS	16620 e	440000 e	37000	100900	58900	211500	, ND	ND e

NON-TARGETED BASE NEUTRALS Total Alkane compounds Total Sulfur Total Other compounds Total Unknown compounds	ND ND 2800 ND	ND ND 7000 ND	ND ND ND 7100	ND 4100 ND 9300	ND ND ND ND	28000 ND ND ND	20 20 20 20 20 20	ND ND 19 p ND	
•	2800 e	7000 e	7100	13400	ND	28000	ND	ND e	

NOTES: J - Detected below reporting limit or is an estimated concentration.
p - Compound also detected in laboratory method blank.
B - Compound also detected in laboratory method blank and sample concentration is a least 5 times greater than laboratory method blank concentration.
e - NJDEP Tier I sample holding time was exceeded.
ND - Not detected.
** - Analyzed by EPA Method 825 results reported in ug/I.
** - Excludes compounds detected in laboratory method blank (p); includes compounds detected at trace concentrations (J) and (B).

TABLE 8: SUMMARY OF BASE NEUTRAL ANALYTICAL TESTING - TEST PIT RESULTS BY EPA METHOD 8270+15
L.E. CARPENTER, WHARTON, NEW JERSEY.

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SAMPLE (D: DATE SAMPLED: SAMPLE DEPTH (foot):		TP-58 3/23/89 4.0 - 4.5		TP-6B 3/23/89 3.5 - 4.0		TP-7B q 3/23/89 4.0 - 5.0	TP-8A 3/23/89 0 - 0.5	TP-88 3/23/89 2.5 - 3.0	FIELD ** BLANK 3/23/89
PARAMETER (ug/kg)		! !							
bis(2-Chloroethyl)ether 1.3-Dichlorobenzene 1.4-Dichlorobenzene 1.2-Dichlorobenzene 1.2-Chlorosopropyl)ether N-Nitroso-di-n-propylamine Hexachloroethane Nitrobenzene Isophorone bis(2-Chloroethoxy)methane 1.2.4-Trichlorobenzene Naphthalene Hexachlorobutadiene Hexachlorobutadiene Hexachlorobutadiene Dimethyl phthalate Acenaphthylene Acenaphthylene 2.4-Dinitrotoluene 2.6-Dinitrotoluene Diethyl phthalate 4-Chlorophenyl phenyl ether Fluorene N-Mitrosodiphenylamine 4-Bromophenyl phenyl ether Hexachlorobenzene Phenanthrene Anthracene Di-n-butyl phthalate Fluoranthene Pyrene Butyl benzyl phthalate 3.3'-Dichlorobenzidine Benzo(alanthracene Di-n-octyl phthalate Benzo(b)fluoranthene Benzo(b)fluoranthene Benzo(b)fluoranthene Benzo(c), i)perylene TOTAL TARGETED BASE NEUTRALS			ND ND ND ND ND ND ND ND ND ND ND ND ND N		00000000000000000000000000000000000000	* 666666666666666666666666666666666666	######################################	**************************************	55555555555555555555555555555555555555
	:	;	:	;	:	:	:	:	: :
NON-TARGETED BASE NEUTRALS Total Benzene compounds Total Other compounds Total Unknown compounds	ND 2300 2800	840000 320000 ND	450 1450 4550	ND 290000 ND	ND 410 1500	ND ND 350000	ND 5200 ND	160000 ND ND	ND 19 p ND
TOTAL NON-TARGETED BASE NEUTRALS ***	5100 0	1180000 6	8450 6	200000	1010 -	350000 0 0	5200 0	180000 0	ND a

NON-TARGETED BASE NEUTRALS Total Benzene compounds Total Other compounds Total Unknown compounds	ND 2300 2800	840000 320000 ND	450 1450 4550	NO 290000 ND	ND 410 1500	ND ND 350000	ND 5200 ND	160000 ND ND	ND 19 p ND	
TOTAL NON-TARGETED BASE NEUTRALS ***	5100 e	1160000 e	6450 e	290000 e	1910 e	350000 e.q	5200 e	160000 e	ND e	

NOTES: J - Detected below reporting limit or is an estimated concentration.
p - Compound also detected in laboratory method blank.
s - NJDEP Tier sample holding time was exceeded, see Variance Report for further discussion.
q - This sample had zer surrogate recovery because of sample dilution.
ND - Not detected.
** - Analyzed by EPA Method 625 reported in ug/l.
*** - Excludes compounds detected in laboratory method blank (p); includes compounds detected at trace concentrations (J).

SAMPLE ID: DATE SAMPLED: SAMPLE DEPTH (feet):	0 - 0.5	TP-9B 3/27/89 2.0 - 2.5	TP-10 3/27/89 7.5 - 8.0	TP-11 3/27/89 7.5 - 8.0	TP-12 3/27/89 8.0 - 9.0	TP-13 3/27/89 5.5 - 6.0	TP-14 3/27/89 2.0 - 2.5	TP-15 3/27/89 5.5 - 6.0	FIELD * BLANK 3/27/89
PARAMETER (ug/kg)						3			
bis(2-Chloroethyi)ether 1,3-Dichlorobenzene 1,4-Dichlorobenzene 1,2-Dichlorobenzene bis(2-Chloroisopropyl)ether N-Nitroso-di-n-propylamine Hexachloroethane Nitrobenzene Isophorone bis(2-Chloroethoxy)methane 1,2,4-Trichlorobenzene Naphthalene Hexachlorobutadiene Hexachlorobutadiene Hexachlorobutadiene Dimethyl phthalate Acenaphthene 2,4-Dinitrotoluene Diethyl phthalate 4-Chlorophenyl phenyl ether Fluorene N-Nitrosodiphenylamine 4-Bromophenyl phenyl ether Hexachlorobenzene Anthracene Di-n-butyl phthalate Fluoranthene Pyrene Butyl benzyl phthalate 3,3'-Dichlorobenzidine Benzo(a)anthracene Di-n-octyl phthalate Benzo(a)nthene Benzo(b)fiuoranthene Benzo(b)fiuoranthene Benzo(a),h'anthracene Benzo(a,h.'a)perylene	22222222222222222222222222222222222222	ND ND ND ND ND ND ND ND ND ND ND ND ND N	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	25555555555555555555555555555555555555	9		55555558885555555555555555555555555555	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	25555555555555555555555555555555555555
TOTAL TARGETED BASE NEUTRALS ***	,=	43770	870000	180000	13000000	830000	4600	320000	15.3

NON-TARGETED BASE NEUTRALS Total Unknown Nitrogen compounds Phenanthrenecarboxylic acid Total Unknown Aliphatic compounds Total Alkane compounds Total Alkane compounds Total Sitosterol compounds Total Benzene compounds Total Other compounds Total Unknown compounds	ND 36900 2400 3000 ND 1900 ND 8100	710 ND 4800 2100 1000 ND ND 2300	ND ND ND ND ND ND ND ND ND ND ND ND ND N	ND ND ND ND ND ND ND ND	XD XD XD XD XD XD XD XD	ND ND ND ND ND 140000 ND	ND ND 390 ND ND ND ND ND ND ND ND	20 20 20 20 20 20 20 20 20 20		
TOTAL NON-TARGETED BASE NEUTRALS	65000	12520	ND	8000	ND	140088	880	ND	ND	ļ

NOTES: J - Detected below reporting limit or is an estimated concentration.
p - Compound also detected in laboratory method blank.
L - Compounds are not separable using this method and therefore have been quantified together.
ND - Not detected.
** - Analyzed by EPA Method 625 reported in ug/l.
*** - Excludes compounds detected in laboratory method blank (p): includes compounds detected at trace concentrations (J) and includes one of the two compounds that have been quantified together (L).

SAMPLE ID: DATE SAMPLED: SAMPLE DEPTH (feet):	3/29/89	TP-17 3/29/89 4.0	3/28/89 5.5 - 6.0	TP-19 3/28/89 3.5 - 4.0	FIELD * BLANK 3/28/89	BLANK 3/29/89
PARAMETER (ug/kg)	**************************************	====== - - - -				
	55555555555555555555555555555555555555	00000000000000000000000000000000000000	22222222222222222222222222222222222222	86 8 8 866 86 86 86 86 86 86 86 86 86 86 86 86	666666666666666666666666666666666666666	25554556666665555555666666666666666666
Indenc(1,2,3-c,d)pyrene Dibenzo(a,h)anthracene Benzo(g,h,i)perylene	ND ND ND	ND ND ND	ND ND ND	ND ND ND	ND ND ND	ND ND ND
TOTAL TARGETED BASE NEUTRALS **	1900000	21176	3810000	845900	ND	1 0

NON-TARGETED BASE NEUTRALS Total Other compounds Total Unknown compounds Total Benzene	ND ND 820000	ND ND 20000	ND 240000	32000 B ND	280 B 200	ND ND	
			ND	ND	ND	ND	i
TOTAL NON-TARGETED BASE NEUTRALS	820000	20000	240000	32000	460	ND a	i

NOTES: J - Detected below reporting limit or is an estimated concentration.
p - Compound also detected in laboratory method blank.
B - Compound also detected in laboratory method blank and sample concentration
is at least 5 times greater than laboratory method blank concentration.
e - NJDEP Tier sample holding time was exceeded, see Variance Report for further discussion.
ND - Not detected.
** - Analyzed by EPA Method 625 reported in ug/l.
*** - Excludes compounds detected in laboratory method blank (p); includes compounds detected at trace concentrations (J) and (6).

TABLE 8: SUMMARY OF BASE NEUTRAL ANALYTICAL TESTING - TEST PIT RESULTS BY EPA METHOD 8270+15
L.E. CARPENTER, WHARTON, NEW JERSEY.

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SAMPLE ID: DATE SAMPLED: SAMPLE DEPTH (feet):	TP-20 3/27/89	TP-21 3/27/89 4.5 - 5.0		TP-23 4/11/89 3.5 - 4	3/29/89	TP-25 3/30/89 2.5		FIELD ** BLANK 3/27/89	FIELD ** BLANK 3/29/E9	FIELD ** BLANK 3/30/89	FIELD *** BLANK 4/11/89
PARAMETER (ug/kg)	2,3 - 4.0			======							
bis(2-Chioroethyi)ether 1.3-Dichlorobenzene 1.4-Dichlorobenzene 1.2-Dichlorobenzene bis(2-Chioroisopropyi)ether N-Nitroso-di-n-propylamine Hexachloroethane Nitrobenzene lsophorone bis(2-Chioroethoxy)methane 1.2.4-Trichlorobenzene Naphthalene Hexachlorobutadiene Hexachlorobutadiene Dimethyl phthalate Acenaphthylene Acenaphthylene 2.4-Dinitrotoluene Diethyl phthalate 4-Chiorophanyl phenyl ether Fluorene N-Nitrosodiphenylamine 4-Bromophanyl phenyl ether Hexachlorobenzene Phenanthrene Anthracene Di-n-butyl phthalate Fluoranthene Pyrene Butyl benzyl phthalate 3.3'-Dichlorobenzidine Benzo(a)anthracene bis(2-Ethylhexyl)phthalate Chrysene Di-n-octyl phthalate Senzo(b)fluoranthene Benzo(a)pyrene lindeno(1.2.3-c.d)pyrene Dibenzo(a,h)anthracene Benzo(a,h) perylene			222222 2222222222222222222222222222222	9 999999999999999999999999999999999999	66666666666666666666666666666666666666		0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	68666666666666666666666666666666666666	6666666-6666666666666666666666666666666	656866556666666666666666666666666666666	\$
TOTAL TARGETED BASE NEUTRALS ""	2840000	15110000	11000	4296	2200000	1800000	2500000	15.3	1 0	ND	ND
NON-TARGETED BASE NEUTRALS Total Benzene compounds Total aldehyde compounds Total alkene compounds Total Phosphoric acid Total Sulfur Total Decane compounds Total Alkane compounds Total Other compounds Total Unknown compounds Total Unknown compounds	450000 ND ND 120000 ND ND ND ND ND	7400000 ND ND ND ND ND ND ND ND ND ND	1100 ND ND ND 1600 ND ND ND ND ND	ND 850 330 ND ND ND ND S50 ND 3560	170000 ND ND ND ND ND ND ND ND ND ND	ND ND ND ND ND ND ND ND	257000 ND ND 82000 ND 100000 ND ND ND ND ND	ND ND ND ND ND ND ND ND ND ND ND ND ND N	ND ND ND ND ND ND ND ND ND ND ND ND ND N	ND ND ND ND ND ND ND ND ND ND ND ND ND N	ND ND ND ND ND ND ND ND

NOTES: J - Detected below reporting limit or is an estimated concentration.
p - Compound also detected in laboratory method blank.
e - NJDEP Tier sample holding time was exceeded, see Variance Report for further discussion.
ND - Not detected.
** - Analyzed by EPA Method 625 reported in ug/t.
*** - Excludes compounds detected in laboratory method blank (p); includes compounds detected at trace concentrations (J).

TABLE 8: SUMMARY OF BASE NEUTRAL ANALYTICAL TESTING - TEST PIT RESULTS BY EPA METHOD 8270-15
L.E. CARPENTER, WHARTON, NEW JERSEY.

P	ag	7	٥	ŧ	1	•

SAMPLE ID: DATE SAMPLED:	TP-27 3/29/89		TP-29 3/28/89	FIELD ** BLANK 3/28/89	FIELD BLANK 3/29/89
SAMPLE DEPTH (feet):	4.5	5.0 - 6.0	4.5 - 5.		

PARAMETER		;	:		;
(ug/kg)		;	;		;
		_			
bis(2-Chioroethyl)ether	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	ND	ND	ND	ND	ND
1.4-Dichlorobenzene	ND	ND	ND	ND	ND :
1.2-Dichlorobenzene	ND	ND	ND	ND	ND :
bis(2-Chloroisopropyl)ether	ND ND	ND ND	ND ND	ND ND	ND I
N-Nitroso-di-n-propylamine Hexachlorcethane	ND	ND	ND I	ND	ND
Nitrobenzene	ND	ND	ND ND	ND	ND !
isopherone	ND	ND	ND	ND	ND !
bis(2-Chioroethoxy)methane	ND	ND	ND	ND	ND !
1,2,4-Trichlorobenzene	ND	ND	ND	ND	ND !
Naphthalene	ND	ND	ND	ND	ND .
Hexachiorobutadiene	ND	ND	ND	ND	ND
Hexachlorocyclopentadiene	ND	ND	ND	ND	ND
2-Chioronapthatene	ND	ND	ND	ND	ND
Dimethyl phthalate	ND	ND	ND	ND	ND :
Acenaphthylene	ND	ND	ND	ND	ND :
Acenaphthene	ND	ŇĎ	, ND	ND	ND :
2,4-Dinitrotoluene	ND	ND	, ND	ND	ND :
2.6-Dinitrotoluene	ND	ND	ND	ND	ND
Diethyl phthalate	ND	ND	ND	ND	ND
4-Chlorophenyi phenyl ether	ND ND	ND	ND	ND	ND .
Fluorene	ND	ND ND	ND ND	ND ND	ND DN
N-Nitrosodiphenylamine 4-Bromophenyl phenyl ether	ND	ND ND	ND	ND ND	ND I
Hexachiorobenzene	ND	ND	ND ND	ND	ND I
Phenanthrene	ND	ND	ND.	NED	ND !
Anthracene	ND	ND	ND	ND	ND :
Di-n-butyi phthalate	ND	ND	ND	ND	ND
Fluoranthene	ND	ND	ND	ND	ND
Pyrene	ΝD	ND	ND	ND	ND
Butyl benzyl phthalate	ND	ND.	ND	ND	ND :
3.3°-Dichtorobenzidine	ND	, ND	ND	ND	ND :
Benzo(a)anthracene	ND	, ND	¦ ND	ND :	ND :
bis(2-Ethylhexyi)phthalate	340000	6700000	1200000	ND	1.0 J
Chrysene	ND	ND	ND	ND	ND :
Di-n-octyl phthalate	ND	ND	ND	ND	ND
Benzo(b) fluoranthene	ND	ND	ND	ND	ND .
Benzo(k) fluoranthene	ND	ND	ND ND	ND	ND .
Benzo(a)pyrene	ND ND	ND ND	ND ND	ND ND	ND ND
Indeno(1,2,3~c,d)pyréne	ND ND	ND ND	ND ND	ND ND	ND I
Dibenzo(a.h)anthracene Benzo(g.h.i)perylene	ND	ND ND	. ND	ND	ND !
Banto/A'u'''\hailiana	.40	, ,,,,	1 140	, W	
TOTAL TARGETED BASE NEUTRALS ***	340000	6700000 q	1200000	ND	1.0 e

NON-TARGETED BASE NEUTRALS Total Benzene compounds Total Other compounds Total Unknown compounds	ND	61000	ND	ND	ND
	QN	24000	ND	260 B	ND
	ND	ND	ND	200	ND
TOTAL NON-TARGETED BASE NEUTRALS	ND	85000 q	ND	460	ND e

NOTES: J - Detected below reporting limit or is an estimated concentration.
p - Compound also detected in laboratory method blank.
B - Compound also detected in laboratory method blank and sample concentration
e - NJDEP Tier sample holding time was exceeded, see Variance Report for further discussion.
q - This sample had zero surrogate recovery because of dilution.
ND - Not detected.
*** - Analyzed by EPA Method 624 reported in ug/l.
*** - Excludes compounds detected in laboratory method blank (p); includes compounds detected at trace concentrations (J) and (B).

SAMPLE ID: Date sampled: Sample depth (foot):	3/28/89	TP-35 3/29/89 4.5	3/29/89	3/28/89	3/29/89	3/28/89	BLANK 3/29/89
PARAMETER (ug/kg)	:	======= : : :	======= : : !	******* ! !		========	•======== • •
bis(2-Chioroethyi)ether 1,3-Dichiorobenzene 1,4-Dichiorobenzene 1,2-Dichiorobenzene 1,2-Dichiorobenzene 1,2-Dichiorobenzene 1,2-Chioroisopropyl)ether N-Nitroso-di-n-propylamine Hexachloroethane Nitrobenzene Isophorone bis(2-Chioroethoxy)methane 1,2,4-Trichiorobenzene Naphthalene Hexachlorobutadiene Hexachlorobutadiene Exachlorobutadiene Dimethyl phthalate Acenaphthylene 2,4-Dinitrotoluene 2,4-Dinitrotoluene 2,5-Dinitrotoluene 2,6-Dinitrotoluene Diethyl phthalate 4-Chlorophenyl phenyl ether Fluorene N-Nitrosodiphenylamine 4-Bromophenyl phenyl ether Hexachlorobenzene Phenanthrene Anthracene Di-n-butyl phthalate Fluoranthene Pyrene Butyl benzyl phthalate Benzo(alanthracene Di-n-octyl phthalate Chrysene Di-n-octyl phthalate Benzo(bliuoranthene	56566666666666666666666666666666666666	ND ND	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	65°°5666666666666666666666666666666666	35566666666666666666666666666666666666	35°566666666666666666666666666666666666
Benzo(k)fluoranthene Benzo(a)pyrene Indeno(1,2,3-c,d)pyrene Dibenzo(a,h)anthracene Benzo(g,h,i)perylene		20 20 20 20 20 20 20	20 20 20 20 20 20 20 20	29 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	ND ND ND ND ND	56565	ND ND ND ND
TOTAL TARGETED BASE NEUTRALS	1	8000		1306100	39000	ND I	ND 1.0 e

NON-TARGETED BASE NEUTRALS Total Benzene compounds Total Phthalate compounds Total Other compounds Total Naphthalene compounds Total Unknown compounds Total Sulfur	81000 ND ND ND ND ND	22222 22222 22220	ND ND 241600 6100 76300 ND	ND ND 377000 11000 ND ND	2200 ND ND ND ND 4000 6800	ND ND 260 B ND 200 ND	ND ND ND ND ND	
TOTAL NON-TARGETED BASE NEUTRALS	81000	ND	324000	388000	13000	460	ND e	ļ

NOTES: J - Detected below reporting limit or is an estimated concentration.
p - Compound also detected in laboratory method blank.
B - Compound also detected in laboratory method blank and sample concentration is at least 5 times the laboratory method blank concentration.
e - NJDEP Tier sample holding time was exceeded, see Variance Report for further discussion.
ND - Not detected.
** - Analyzed by EPA Method 625 results reported in ug/l.
** - Excludes compounds also detected in laboratory method blank (p); includes compounds detected at trace concentrations (J) and (B).

TABLE 8: SUMMARY OF BASE NEUTRAL ANALYTICAL TESTING - TEST PIT RESULTS BY EPA METHOD 8270+15 L.E. CARPENTER, WHARTON, NEW JERSEY.

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SAMPLE (D: DATE SAMPLED: SAMPLE DEPTH (feet):		3/29/89	TP-41 3/29/89 4.0	TP-42 4/4/89 6.5 - 7.0	TP-43 4/4/89 3.5 - 4.0	TP-44 4/4/89 6.0 - 6.5	FIELD BLANK 3/29/89	B NK	FIELD BLANK 4/4/89
SAMPLE DEPTH (feet): PARAMETER (ug/kg) bis(2-Chioroethyi)ether 1.3-Dichlorobenzene 1.4-Dichlorobenzene 1.2-Dichlorobenzene bis(2-Chioroisopropyl)ether N-Nitroso-di-n-propylamine Hexachloroethane Nitrobenzene loophorone bis(2-Chioroethoxy)methane 1.2.4-Trichlorobenzene Naphthalene Hexachlorobutadiene Hexachloroottadiene 2-Chioronapthalene Dimethyl phthalate Acenaphthylene Acenaphthene		7.5 ND ND ND ND ND ND ND ND ND ND	4 . 0 ND ND ND ND ND ND ND ND ND ND ND ND ND N	8 5 - 7 . 0 ND ND ND ND ND ND ND ND ND N	13.5 - 4.0 ND ND ND ND ND ND ND ND ND ND	4/4/89 6.0 - 6.5 ND ND ND ND ND ND ND ND ND ND ND ND ND	3/30/00	2100100	
2.4-Dinitrotoluene 2.6-Dinitrotoluene Diethyl phthalate 4-Chlorophenyl phenyl ether Fluorene N-Nitrosodiphenylamine 4-Bromophenyl phenyl ether Hexachlorobenzene Phenanthrene Anthracene Di-n-butyl phthalate Fluoranthene Pyrene Butyl benzyl phthalate 3.3'-Dichlorobenzidine Benzo(a)anthracene bis(2-Ethylhexyl)phthalate Chrysene Benzo(b)fluoranthene Benzo(b)fluoranthene Benzo(b)fluoranthene Benzo(a)pyrene Indeno(1,2,3-c,d)pyrene Dibenzo(a,h)anthracene Benzo(a,h)anthracene Benzo(a,h)anthracene	20	210 J ND ND ND 180 J ND ND ND 1200 J 1200 J 2300 ND 2300 ND 2300 ND 2300 ND 2300 ND 2300 ND ND ND ND ND ND ND ND ND ND	65555555555555555555555555555555555555	70000000000000000000000000000000000000	ND ND ND ND ND ND ND ND ND ND ND ND ND N	ND ND ND ND ND ND ND ND ND ND ND ND ND N	55555555555555555555555555555555555555	38668888888888888888888888888888888888	655666666666666666666666666666666666666
TOTAL TARGETED BASE NEUTRALS	32000	43120	290000	7028900	15040000	- 1	1 e	ND CIN	ND ND
NON-TARGETED BASE NEUTRALS Total Phosphoric acid Total Propanoic acid Total Phenoi compounds Total Phenoi compounds Total State Total Server compounds Total Server compounds Total Unknown compounds	ND ND ND 1900 ND ND 17900 ND	ND ND ND ND ND ND 840 ND 12600	ND ND	540000 158000	180000 410000 53000 596000 ND ND ND ND ND	710000 1800000 100000 4453000 93000 ND ND ND ND	00 00 00 00 00 00 00 00 00	20 00 00 00 00 00 00 00 00 00 00 00 00 0	20 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
TOTAL NON-TARGETED BASE NEUTRALS ***	19800	13440	ND :	5317000	1239000	6956000	ND e	ND	ND

NOTES: J - Detected below reporting limit or is an estimated concentration.

e - NJDEP Tier sample holding time was exceeded, see Variance Report for further discussion.

ND - Not detected.

a - Analyzed by EPA Method 625 reported in ug/l.

ncludes compounds detected at trace concentrations (J).

FOOTNOTE: TP-39 analytical results were reported as TP-37 due to a labelling error in the field. TP-37 was sampled 3/28/89 and TP-39 was sampled 3/30/89.

TABLE 8: SUMMARY OF BASE NEUTRAL ANALYTICAL TESTING - TEST PIT RESULTS BY EPA METHOD 8270+15
L.E. CARPENTER, WHARTON, NEW JERSEY.

044015 18.				FIELD .	1 1225
SAMPLE ID:	TP-48	15-47	TP-48	BLANK	BLANK
DATE SAMPLED:	4/4/89	4/4/89	4/5/89	4/4/89	4/5/89
SAMPLE DEPTH (feet):	;5.0 - 8	;8.0 - 7	5.5 - 6.		; ;

PARAMETER	i	i			i i
(ug/kg)	i	į] [
N: 4/8 / MAI Ab. 13 - Ab	i				1 1
bis(2-Chloroethyl)ether	ND	ND	ND	ND	ND
1.3-Dichlorobenzene	ND	ND	ND	ND	ND I
1.4-Dichlorobenzene 1.2-Dichlorobenzene	ND ND	ND	ND	ND	ND :
	ND.	ND.	ND I	ND	ND :
bis(2-Chloroisopropyl)ether N-Nitroso-di-n-propylamine	ND ND	! ND ! ND	ND ND	ND	ND :
Hexachioroethane	ND ND	. ND	ND	ND ND	ND ND
Nitrobenzene	. ND	. ND	ND I	ND ND	ND I
Isophorone	ND	. ND	ND	ND	ND !
bis(2-Chloroethoxy)methane	ND	. ND	ND	ND	ND :
1.2.4-Trichiorobenzene	ND	. ND	ND	ND	ND !
Naphthalene	ND	. ND	ND	ND	ND !
Hexachlorobutadiene	ND	ND	ND	ND	ND !
Hexachlorocyclopentadiene	ND	ND	NED	ND	ND
2-Chloronapthalene	ND	ND	ND	ND	ND
Dimethyl phthalate	ND	ND	ND	2.2 Jp	ND
Acenaphthylene	ND	ND	ND	ND	ND .
Acenaphthene	ND	ND	ND	ND	ND :
2.4-Dinitrotaluene	, ND	, ND	ND	ND	ND :
2,6-Dinitrotoluene	; ND	, ND	ND	ND	, ND ;
Diethyl phthalate	ND	ND	ND I	ND	; ND ;
4-Chlorophenyl phenyl ether	ND	ND	ŅD	ND	ND ;
Fluorene	ND	ND	ND	ND	ND
N-Nitrosodiphenylamine	ND	ND	ND	ND	ND
4-Bromophenyl phenyl ether	ND	ND	ND	ND	ND
Hexach i orobenzene Phenanthrene	, ND	ND	ND I	ND	ND
Anthracene	ND ND	ND	ND	ND	ND :
Di-n-butyi phthalate	ND	ND ND	ND	ND	ND :
Fluoranthene	ND	ND	ND ND	ND ND	ND ND
Pyrene	ND	ND	ND ND	ND ND	ND !
Butyl benzyl phthalate	ND	14000 J	ND	ND	ND I
3,3°-Dichlorobenzidine	ND	ND	ND	ND	ND :
Benzo(a)anthracene	ND	ND	ND	ND	ND
bis(2-Ethylhexyl)phthalate	8800000	7300000	11000000	ND	ND
Chrysens	ND	ND	ND	ND	ND
Di-n-octyl phthalate	ND	180000	590000	ND	ND
Benzo(b) fluoranthene	ND	ND	ND	ND	ND
Benzo(k) fluoranthene	ND	ND	ND .	ND	ND
Benzo(a)pyrene	ND	ND .	ND	ND	ND
Indeno(1,2,3-c,d)pyrene	, ND	, ND	ND ;	ND	ND :
Dibenzo(a,h)anthracene	ND	ND	ND	ND	, ND
Benzo(g,h,i)perylene	ND	ND	ND	ND	ND :
TOTAL TARRETER DAMP MEMBRALE	I				
TOTAL TARGETED BASE NEUTRALS ***	: \$800000	;/494000	11590000	ND	ND ;
	:	:	!!	1	
NON TARRETTE BARR MENTE		<u>i</u>			
NON-TARGETED BASE NEUTRALS	i				
Total Benzene compounds	ND	49000	ND	ND	ND
Total Propanoic acid	740000	, ND	ND :	ND	ND
Total Phenoi compounds	ND	! ND	ND .	ND	ND :
Total Phthalate compounds Total Ketone compounds	4391000		ND I	ND	ND :
iorai varona combonuna	ND	, ND	, ND ;	ND	! ND !

NON-TARGETED BASE NEUTRALS	İ		İ	İ	1 1
Total Benzene compounds	ND	49000	ND	. ND	. ND
Total Propanoic acid	740000	ND	. ND	ND	ND
Total Phenol compounds	. ND	ND	ND	ND	ND
Total Phthalate compounds	4391000	1878000		ND	ND
Total Ketone compounds	ND	ND	ND	ND	. ND
Total Sulfur	39000	ND	ND	ND	ND .
Total Unknown compounds	159000	ND	4790000	ND	ND
·		•			
TOTAL NON-TARGETED BASE NEUTRALS	5329000	1927000	4798000	ND	ND .

NOTES: J - Detected below reporting limit or is an estimated concentration.
p - Compound also detected in laboratory method blank.
B - Compound also detected in laboratory method blank and sample concentration is at least 5 times greater than laboratory method blank concentration.
ND - Not detected.
*** - Analyzed by EPA Method 625 results reported in ug/1.
*** - Excludes compounds detected in laboratory method blank (p); includes compounds detected at trace concentrations (J) and (B).

TABLE 8: SUMMARY OF BASE NEUTRAL ANALYTICAL TESTING - TEST PIT RESULTS BY EPA METHOD 8270+15
L.E. CARPENTER, WHARTON, NEW JERSEY.

E.C. OMILENCE, WINNIGH, HEW VERGET.						Page 1	1 of 1	5	
SAMPLE ID: Date Sampled: Sample Depty (feet):	10 - 0.5	: 4/10/89 :3.0 - 3.5	10 - 0.5	4/10/89	TP-52	TP-53	TP-54	BLANK 4/10/89	
PARAMETER (up/kg) bis(2-Chioroethyi) ether 1.3-Dichiorobenzene 1.2-Dichiorobenzene 1.2-Dichiorobenzene bis(2-Chioroisopropyi) ether N-Nitroso-di-n-propylamine Hexachioroethane Nitrobenzene lisophorone bis(2-Chioroethoxy)methane 1.2.4-Trichiorobenzene Naphthalene Hexachiorobutadiene Hexachiorobutadiene Hexachiorootadiene Dimethyi phthalate Acenaphthyiene Acenaphthyiene Acenaphthyiene 2.4-Dinitrotoluene Diethyi phthalate 4-Chiorophenyi phenyi ether Fluorene 4.6-Dinitrotoluene Diethyi phthalate 4-Chiorophenyi phenyi ether Hexachiorobenzene Phenanthrene Anthracene Di-n-butyi phthalate Fluoranthene Pyrene Butyi benzyi phthalate Fluoranthene Benzo(a)anthracene Benzo(bifluoranthene Benzo(bifluoranthene Benzo(c)a)nitracene Ideno(1,2,3-c,d)pyrene Dibenzo(a,h)nitracene Benzo(c),hi)peryiene TOTAL TARGETED BASE NEUTRALS***	0 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	ND ND ND ND ND ND ND ND ND ND ND ND ND N	ND ND ND ND ND ND ND ND ND ND ND ND ND N			ND ND ND ND ND ND ND ND ND ND ND ND ND N		5 556666666666666666666666666666666666	

NON-TARGETED BASE NEUTRALS Total Methylphenanthrene/anthracene isomer Total Dimethyl Benzene isomer Total Unknown compounds 4-Hydroxyl -4-methyl-2-pentanone Benzo(e)pyrene Substituted propanoic acid	ND ND 740 ND NO	1080 ND 22320 5200 pn 1300 420	ND 370 1390 2300 pn ND	ND ND 950 14000 pn ND ND	ND ND 1920 p 8100 pn ND ND	ND 180 2700 p 11000 pn ND	ND ND 2250 p 29000 pn ND	ND ND 426 ND ND ND
Total alcohol Total alkane compounds	360 ND	1300	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND
Total alkene compounds	190	780	180	ND	ND	ND	ND	ND
Total Other compounds	810	4710	630	1890	150	; 180 p	2190 p	8
TOTAL NON-TARGETED BASE NEUTRALS ***	2100 •	31890 e	2570 e	2840 B	890 e	650 e	890 e	428 e

NOTES: J - Detected below reporting limit or is an estimated concentration.
L - These compounds are not separable using this method, and are therefore quantified together.
p - Compound also detected in laboratory method blank.
B - Compound also detected in laboratory method blank and sample concentration
is at least 5 times the laboratory method blank concentration.
n - Compound is possibly due to laboratory contamination (aldo) condensation product).
e - NJDEP Tier sample holding time was exceeded, see Variance Report for further discussion.
ND - Not detected.
- Sample scanned for a total of 25 non-targeted base neutral compounds.
** - Analyzed by EPA Method 625 reported in ug/l.
*** - Excludes compounds detected in laboratory method blank (p) and (n): includes compounds detected at trace concentrations
(J) AND (B). Also includes one of the two compounds quantified together (L).

TABLE 8: SUMMARY OF BASE NEUTRAL ANALYTICAL TESTING RESULTS - TEST PIT RESULTS BY EPA METHOD 8270+15
L.E. CARPENTER, WHARTON, NEW JERSEY.

SAMPLE ID:	: TP-55	: TP-56	! TP-57	! TP-58		FIELD .
DATE SAMPLED:	4/7/89	4/7/89	4/7/89		TP-59	BLANK
SAMPLE DEPTH (feet):			14///48	4/7/89	4/7/89	4/7/89
*******************	,	5.0 - 5.5	,4.5 - 5.0	15.0 - 5.5	14.5 - 5.0	
PARAMETER					*****	=======
(ug/kg)	!	;	İ	i		ļ
(48/48)	:	1	i	i	•	!
bis(2-Chloraethyl)ether	. ND	ND	ND			
1.3-Dichlorobenzene	ND	ND	ND ND	ND ND	ND	ND
1.4-Dichlorobenzene	ND	ND	ND:	ND ND	ND	ND
1.2-Dichlorobenzene	ND	ND	ND	ND	ND	ND
bis(2-Chloroisopropyl)ether	ND	ND	ND	ND	ND	ND .
N-Nitroso-di-n-propylamine	ND	. ND	ND ND	ND	ND ND	ND
Hexachloroethane	ND	ND	ND	. ND	ND ND	ND I
Nitrobenzene	ND	. ND	. ND	מא	. ND	ND
Isophorone	ND	. ND	ND	ND ND	ND ND	ND NO
bis(2-Chloroethoxy)methane	ND	ND ND	ND ND	ND	ND ND	ND I
1.2.4-Trichlorobenzene	ND	ND	ND	ND ND	! ND	ND ND
Naphthalene	ND	ND	ND	NO.	. ND	ND ND
Hexachlorobutadiene	ND	ND	ND	ND	ND ND	ND ND
Hexachiorocyclopentadiene	, ND	ND	. ND	ND	ND	ND
2-Chioronapthaiene	ND	ND	ND	ND	ND	ND I
Dimethyl phthalate	ND	ND	ND	ND	ND	ND ND
Acenaphthylene	ND	ND	ND	ND	ND	ND I
Acenaphthene	, ND	ND	ND	ND	ND	ND .
2.4-Dinitrotoluene	NĎ	ND	ND	ND	ND	ND
2.6-Dinitrotoluene	ND	ND	ND ND	ND	ND	ND
Diethyl phthalate	ND:	ŇĎ	ND	ND	ND	ND
4-Chiorophenyi phenyi ether	ND	ND	МĐ	ND	ND	ND
Fluorene	ND	: ND .	ND	ND	ND	ND
N-Nitrosodiphenylamine	ND	, ND	ND	ND	ND	ND
4-Bromophenyl phenyl ether Hexachlorobenzene	ND	ND :	, ND	ND .	ND	NEO :
Phenanthrene	ND	ND .	ND	ND .	ND	ND :
Anthracene	1100 J	2400 J	3600 J	1600 J	540 J	ND :
Di-n-butyi phthalate	ND	ND :	ND	, ND	140 J	ND :
Fluoranthene	ND	ND	ND	ND	ND	ND :
Pyrene	1300 J 1200 J	2600 J	3200 J	1700 J	640 J	ND
Butyl benzyl phthalate	1200 J	ND	3 t 0 0 J	1800 J	510 J	ND ,
3.3'-Dichlorobenzidine	ND	73000	46000	35000	1100	ND :
Benzo(a)anthracene	ND ND	ND ND	ND	ND	ND :	ND ;
bis(2-Ethylhexyl)phthalate	910000 B	6200000 B	1600 J	ND	350 J	ND
Chrysens	ND S	MD 8			25000 B	ND ;
Di-n-octyl phthalate	11000	ND 24000	1600 J	ND	300 J	ND
Benzo(b)fluoranthene	1000 TF	24000 ND	2200 J	20000	2900	ND ;
Benzo(k)fluoranthene	1000 1	ND I	1600 JL 1600 JL	ND	470 JL	ND :
Benzo(a)pyrene	ND JL	ND ND	ND JE	1400 J	470 JL	ND
Indeno(1,2,3-c,d)pyrene	ND	ND ND	ND ND	ND .	580 J	ND
Dibenzo(a,h)anthracene	ND	ND ND	ND ND	ND :	180 J	ND
Benzo(g,h,i)perylene	ND	ND	ND ND	ND :	ND ;	ND :
- ' '		, ,,,	RU I	ND .	160 J	ND
TOTAL TARGETED BASE NEUTRALS ***	925600	6302000	1782900	3561300	32580	
				2201200 ;	32360 ;	ND ;

TOTAL NON-TARGETED BASE NEUTRALS Total Phthalates Total Propanoic acid Total Phenols Sulfur Phosphoric Acid Total Other compounds	14800 192800 15800 18000 23000	57000 1445000 146000 16000 62000	ND 3200000 ND ND ND 22000	80760 384000 102600 ND 57000	1170 31300 3450 1400 4100	25255	
Total Other compounds Total Unknown compounds	29100 4400	ND 29000	ND 16500	ND 10000	36000 5590	ND ND	
TOTAL NON-TARGETED BASE NEUTRALS	297900	1755000	3238500	634300	81840	ND	

NOTES: J - Detected below reporting limit or is an estimated concentration.
p - Compound also detected in laboratory method blank.
B - Compound also detected in laboratory method blank and sample concentration
is at least 5 times the laboratory method blank concentration.
L - These compounds are not separable by this method and have therefore been quantified together.
ND - Not detected.
** - Analyzed by EPA Method 825 results reported in ug/l.
*** - Excludes compounds detected in laboratory method blank (p): includes compounds detected at trace concentrations (J) and (B)
Also includes one of the two compounds that have been quantified together.

SUMMARY OF BASE NEUTRAL ANALYTICAL TESTING - TEST PIT RESULTS BY EPA METHOD 8270+15 L.E. CARPENTER, WHARTON, NEW JERSEY. TABLE 8:

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SAMPLE ID: Date Sampled: Sample Depth (feet):	TP-60 4/7/89 4.5 - 5.0	TP-61 4/7/89 4.5 - 5.0	TP+62 4/7/89 5.5 - 6.0	TP-63 q 4/5/89 7.5 - 8.0	4/3/89	TP-65 4/5/89 8.5 - 9.0	TP-66 4/5/89 7.5 - 8.0	FIELD ** BLANK 4/5/89	BLANK 4/7/89	i
DATE SAMPLED:	4/7/89 4.57-5.0 ND ND ND ND ND ND ND ND ND ND ND ND ND N	4/7/89 4.57-5.0 ND ND ND ND ND ND ND ND ND ND ND ND ND N	4/7/89 5.57-6.0 ND ND ND ND ND ND ND ND ND ND ND ND ND N	4/5/89 7.5 - 8.0 ND ND ND ND ND ND ND ND ND ND ND ND ND	4/5/89 8.5 - 9.0 ND ND ND ND ND ND ND ND ND ND ND ND ND	4/5/89 0 8.5 - 9.0 ND ND ND ND ND ND ND ND ND ND ND ND ND N	4/5/88 7.5-8.0 ND ND ND ND ND ND ND ND ND ND ND ND ND N	4/5/89		
Anthracene Di-n-butyl phthalate Fluoranthene Pyrene Butyl benzyl phthalate 3.3'-Dichlorobenzidine Benzo(a)anthracene bia(2-Ethylhexyl)phthalate Chrysene Di-n-octyl phthalate Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(a)pyrene Indeno(1,2,3-c,d)pyrene Dibenzo(a,h)anthracene Benzo(g,h,i)perylene	ND ND ND 140000 ND ND 1300000 8 25000 J ND ND ND ND ND ND ND ND ND ND ND ND ND	ND ND ND 30000 ND ND 120000 B 7800 J ND ND ND ND ND ND	ND ND ND 120 J ND ND 11000 B ND 230 J ND ND ND ND ND ND ND	ND ND ND 85000 ND ND 430000 B* ND ND ND ND ND ND ND ND	ND ND 58 J 150 J ND ND 850 p 44 J ND ND ND ND ND ND ND ND ND ND ND ND ND	00 00 00 00 00 00 00 00 00 00 00 00 00	20	2 665 65 65 65 65 65 65 65 65 65 65 65 65	2 3333333333333333333333333333333333333	
TOTAL TARGETED BASE NEUTRALS ***	1472000	; 157800	¦ 11350	¦525000 q	¦ 296	¦ ND	¦ ND	, RU	, 100	•
NON-TARGETED BASE NEUTRALS Total Benzene compounds Sulfur Total Decane compounds Total Phenol Total Propanoic acid Total Propanoic acid Total Hexanoic acid Total Hexanoic acid Total Phthalate compounds Total Alkane compounds Total Aldehyde compounds Total Other compounds Total Unknown compounds	ND 27000 24000 118000 8914000 150000 ND 30000 ND ND 08000 24000	ND ND ND 3509000 350900 23000 ND ND ND ND 179000	ND 1300 ND 340 3330 810 ND ND ND ND ND ND ND	13000 ND ND ND ND ND ND ND ND ND ND ND	1810 ND ND ND ND ND ND ND ND ND ND ND ND 1130	ND ND ND ND ND ND ND ND ND ND 230 ND 260	ND ND ND ND ND ND ND ND 190 ND 3500 B	ND ND ND ND ND ND ND ND ND ND ND ND ND N		

NOTES: J - Detected below reporting limit or is an estimated concentration.
q - This sample had zero recovery because of dilution.
p - Compound also detected in laboratory method blank.
B - Compound also detected in laboratory method blank and sample concentration
is at least 5 times the laboratory method blank concentration.

B*/p* - Compound also detected in the laboratory method blank at a concentration of 3 to 5 times the CRDL Based on
NJDEP Tier I guidelines, this value is qualified and the associated method blank value is rejected.

ND - Not detected.

*** - Analyzed by EPA Method 825 reported in ug/l.

*** - Excludes compounds detected in laboratory method blank (p); includes compounds detected at trace concentrations (J)

TABLE 8: SUMMARY OF BASE NEUTRAL ANALYTICAL TESTING - TEST PIT RESULTS BY EPA METHOD 8270+15
L.E. CARPENTER, WHARTON, NEW JERSEY.

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SAMPLE ID: Date sampled: Sample Depth (feet):	TP-67 4/5/89 3.0 - 3.5	TP-68 4/4/89 7.5 - 8.0	TP-69 4/4/89 5.5 - 6.0	TP-70 4/4/89 7.5 - 8.0		TP-72 4/10/89 6.0 - 6.5		BLANK 4/5/89	BLANK 4/10/89
DATE SAMPLED: SAMPLE DEPTH (feet): PARAMETER (ug/kg) bis(2-Chloroethyl)ether 1.3-Dichlorobenzene 1.4-Dichlorobenzene 1.4-Dichlorobenzene bis(2-Chloroisopropyl)ether N-Nitroso-di-n-propylamine Hexachioroethane Nitrobenzene bis(2-Chloroethoxy)methane 1.2,4-Trichlorobenzene Naphthaiene Hexachiorobutadiene Hexachiorobutadiene Hexachiorobutadiene 2-Chioronapthaiene Dimethyl phthalate Acenaphthene 2.4-Dinitrotoluene 2.6-Dinitrotoluene 2.6-Dinitrotoluene Diethyl phthalate 4-Chlorophenyl phenyl ether	4/5/89 3 0 - 3 5 ND ND ND ND ND ND ND ND ND ND ND ND ND N	4/4/89 7.5 - 8.0 ND ND ND ND ND ND ND ND ND ND ND ND ND	4/4/89 5.5 - 6.0 ND ND ND ND ND ND ND ND ND ND ND ND ND N	4/4/89 7.5 - 8.0 ND ND ND ND ND ND ND ND ND ND ND ND ND N	4/5/89 5:0 - 5:5 ND ND ND ND ND ND ND ND ND ND ND ND ND N	4/10/88 6.0 - 8.5 ND ND ND ND ND ND ND ND ND ND ND ND ND	4/4/89	4/5/89	4/10/89
Fluorene 4-Bromophenyl phenyl ether Hexachiorobenzene Phenanthrene Anthracene Di-n-butyl phthalate Fluoranthene Butyl benzyl phthalate 3.3'-Dichiorobenzidine Benzo(a)anthracene Di-n-octyl phthalate Chrysene Benzo(b)fluoranthene Benzo(b)fluoranthene Benzo(b)fluoranthene Benzo(a)pyrene Indeno(f,2,3-c,d)pyrene Olbenzo(a,h)anthracene Benzo(a,h) in perylene	200 200 200 200 200 200 200 200 200 200	22222222222222222222222222222222222222	ND ND ND 68 J 67 J 65 J 85 J 80 ND 140 J 140 J 140 J 140 J 140 J 140 J 140 J 140 J 140 J 140 J 140 J	100 100 100 100 100 100 100 100 100 100	NO NO NO NO NO NO NO NO NO NO NO NO NO N	5252525888 56555555555555555555555555555	666666666666666666666666666666666666666	3 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	68686668666666666666666666666666666666
TOTAL TARGETED BASE NEUTRALS ***	28000000	1700	1202	503	1500000	26000 e	ND	ND	ND e
NON-TARGETED BASE NEUTRAL Total Alkane compounds Total Sulfur Total Sterold compounds Total Alkene compounds Total Aldehyde compounds Total Benzeneacetic acid Total Benzene compounds Total Other compounds Total Other compounds	ND ND ND ND ND ND 4500000 ND 530000	440 1200 410 ND ND ND ND ND ND	790 390 ND 730 340 ND ND ND	800 ND ND 360 ND 450 ND ND 7790	ND ND ND ND ND ND ND ND	1700 ND ND 4100 ND ND ND ND ND 36000 p	ND ND ND ND NO NO NO ND	00 00 00 00 00 00 00 00	ND ND ND ND ND ND ND ND 420

NOTES: J - Detected below reporting limit or is an estimated concentration.
p - Compound also detected in laboratory method blank.
B - Compound also detected in laboratory method blank and sample concentration
is at least 5 times the laboratory method blank concentration.
B* - Compound also detected in laboratory method blank at aconcentration of 3 to 5 times the CRDL. Based on NJDEP Tier I guidelines, this value is qualified and the associated method blank value is rejected.
L - These compounds are not separable using this method and have therefore been quantified together.
e - NJDEP Tier sample holding time was exceeded.
NDD - Not detected.
** - Analyzed by EPA Method 625 results reported in ug/l.
** - Excludes compounds detected in method blank (p): includes compounds detected at trace concentrations (J) and (8)
Also includes one of the two compounds that have been quantified together (L).

SAMPLE ID: DATE SAMPLED: SAMPLE DEPTH (feet):	TP-73 4/10/89 7.5 - 8.0	TP+74 4/10/89 6.5 = 7.0	TP-75 4/5/89 7.5 - 8.0	TP-77 4/7/89 6.0 - 6.5	TP-78 4/7/89 8.0 - 6.5	TP-79 4/7/89 8.5 - 7.0	FIELD * BLANK 4/5/89	BLANK 4/7/89	FIELD ** BLANK
PARAMETER (ug/kg) bis(2-Chloroethyl)ether 1.3-Dichlorobenzene 1.4-Dichlorobenzene 1.2-Dichlorobenzene 1.2-Dichlorobenzene bis(2-Chloroethane)ether N-Nitrobenzene lisophorone	\$\frac{1}{2}\$\frac	NDD NDD NDD NDD NDD NDD NDD NDD NDD NDD	2	20000000000000000000000000000000000000	2 666666666666666666666666666666666666	ND ND ND ND ND ND ND ND ND ND ND ND ND N	6 6666666666666666666666666666666666666	6 6666666666666666666666666666666666666	⁵ 666666666666666666666666666666666666
NON-TARGETED BASE NEUTRAL Total Aikane Total Sulfur Total Steroid Total Unknown Total Aikane Total Aikane 4-Hydroxy-4-methy!-2-pentanone Total Other compounds TOTAL NON-TARGETED BASE NEUTRALS	ND NÖ NÖ NÖ 3710 p NO NO 37000 pn NO	23900 5000 3000 41300 ND 19100 ND 8000	20 20 20 20 20 20 20 20 20 20 20 20 20 2	460 ND 730 4580 ND 250 ND ND ND	ND ND ND 1180 ND ND ND ND	ND 620 ND 230 ND ND ND 470	200220 200220 200220 200220	20 20 20 20 20 20 20 20 20 20 20 20 20 2	ND ND 420 ND ND ND ND ND ND

NOTES: J - Detected below reporting limit or is an estimated concentration.
p - Compound also detected in laboratory method blank.
n - Compound possibly due to laboratory contamination (aldol condensation product).
L - These compounds are not separable using this method and have therefore been quantified together.
e - NJDEP Tier sample holding time was exceeded, see Variance Report for further discussion.
ND - Not detected.
*** - Analyzed by EPA Method 625 results reported in ug/l.
*** - Excludes compounds detected in laboratory method blank (p) and (n); includes compounds detected at trace concentrations (J) and includes one of the two compounds that have been quantified together (L).

TABLE 9

SUMMARY OF PRIORITY POLLUTANT METALS TESTING - TEST PIT RESULTS

TABLE 9: SUMMARY OF PRIORITY POLLUTANT METALS TESTING - TEST PIT RESULTS L.E. CARPENTER, WHARTON, NEW JERSEY.

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																		FIELD	•	FIELD •	٠	FIELD .	14
SAMPLE ID:	1	TP-1A .	1	TP-1B +	ı	TP-2A	1	TP-2B	١	TP-3A	ı	TP-3B	- 1	TP-4A	t	TP-4B	1	BLANK	1	BLANK	1	BLANK	ı
DATE SAMPLED:	1	8/3/89	1	8/3/89	-1	3/23/89	1	3/23/89	-1	3/22/89	1	3/22/89	- 1	3/22/89	- 1	3/22/89	1	3/22/89	ı	3/23/89	1	8/3/89	- 1
SAMPLE DEPTH (feet):	1	0 - 0.5	ı	4.0 - 5.0	1	0 - 0.5	- 1	1.7	ı	0 - 0.5	ı	4.5 - 5.0)	0 - 0.5	ı	4.5 - 5.0	1		l		ı		1
***************************************	1==	::::::::	= =	========	= :		= :		= =	*********	:= :		= =	:::::::::::	= :		= =	=======	:= :	=======	= =	2822222	:=
PARAMETER	1		ı		ı		i		İ		ı		ı		- 1		ı		1		l		ı
(ag/kg)	t		1		1		ı		1		ı		ı		1		1		1		ı		1
• •	ı		1		1		1		1		ı		ı		1		1		1		ı		1
Antisony	ı	HD	i	ND	ł	10.5 J	ı	ND	1	RD	ı	RD	ı	ND	ı	6.0 J	ŧ	RD	ı	KD	1	ND	ı
Arsenic	1	2.6	ı	13	ŧ	6	ı	7.9	1	1.4 J	ı	3.6	ı	2.5	ı	3.0	ı	ND	1	ND	ı	ND	1
Beryllium	1	0.5	1	0.6	1	0.78 J	1	0.75 J	1	0.46 J	ı	0.88 J	ı	0.47 J	1	0.76 J	1	RD	ı	RD	1	ND	ı
Cadmium	ı	KD	1	HD	1	RD	1	ND	1	RD	ı	ND	i	ND	ŀ	1.1 J	ı	ND	ı	RD	1	ND	1
Chronium	1	8	ı	23	ı	36.8	1	22.2	ı	27.9	1	18.6	1	12.0	-1	26.4	1	ND	1	ND	ı	0.01	t
Copper	1	18	ı	24	1	36.1	ı	31.2	1	19.0	1	28.1	1	24.0	-1	27.5	1	5.4 J	1	8.5 J	ı	ND	1
Lead	1	6	ı	43	ı	63.4	1	79.6	1	31.2	İ	12.1	ı	25.7	-	75.2	1	ND	1	1.3 J	ı	ND	1
Nercury .	1	HD	1	ND	1	0.3	ı	0.3	1	MD	-	ND	1	RD	1	ND	1	ND	1	ND	1	ND	1
Nickel	ı	6	1	47	ı	89.8	1	12.6 J	ł	72.2	t	26.5	E	11.1	1	16.3	1	ND	1	6.3 J	ı	ND	1
Selenium	ı	0.7	1	ND	ı	0.47 J	- 1	0.79 J	ı	RD	1	0.5 J	1	ND	1	0.65 J	1	RD	1	1.7 J	ı	ND	1
Silver	ı	ND	1	ND	1	ND	ŧ	ND	ı	ND	1	ND	ı	ND	ı	ND	1	HD	1	RD	ı	ND	1
Thallium	ı	HD	1	ND	ı	RD	i	ND	i	RD	ı	0.25 J	1	ND	ı	ND	ı	HD	1	ND	ı	ND	ı
Zinc	ı	34	1	148	ı	121	1	157	ı	44.2	ı	103	1	62.5	ı	130	1	4.1 J	1	5.4 J	1	0.03	ı
	ŧ		1		ı		1		ı		ı		1		1		1		ı		1		1

NOTES: J - Detected below reporting limit or is an estimated concentration.

ND - Not detected.

⁻ Sample obtained by soil boring at MV-13s location.
- Reported in ug/1.

TABLE 9: SUMMARY OF PRIORITY POLLUTANT METALS TESTING - TEST PIT RESULTS L.E. CARPENTER, WHARTON, NEW JERSEY.

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FIELD ** FIELD .. I TP-7B TP-8A I TP-8B I BLANK I BLANK TP-5B SAMPLE ID: TP-SA 3/23/89 | 3/23/89 | 3/23/89 | 3/27/89 1 3/27/89 | 3/23/89 | | 3/23/89 | 3/23/89 | 3/23/89 | 3/23/89 DATE SAMPLED: 0 - 0.5 | 4.0 - 4.5 | 0 - 0.5 | 3.5 - 4.0 | 0 - 0.5 | 4.0 - 5.0 | 0 - 0.5 | 2.5 - 3.0 | 0 - 0.5 | 2.0 - 2.5 | SAMPLE DEPTH (feet): PARAMETER (mg/kg) 89.0 423 6.7 J Antimony 7.5 6.5 14.2 17.1 5.2 9.5 ND 3.9 3.3 Arsenic 10.5 0.48 0.67 J 0.69 J 0.90 J 0.74 J 0.81 J 0.65 J 0.8 J Beryllium 1.1 J ND 27.5 Cadnium. 17.2 29.1 15.7 18.1 491 ND 17.4 128 17.1 14.9 19 5.6 J Chronium 20.5 34.3 160 36 28.4 15.5 23.8 17.8 111 8.5 J 23.8 10.3 J Copper 21.7 30.3 6530 338 765 14.7 12.7 1.3 J Lead 19.5 0.3 0.90 3.5 0.5 0.1 0.1 0.5 Hercury 24.7 40.0 16.1 16.9 **Rickel** 18.8 0.36 J RD 0.3 J 0.34 J 0.9 J 1.9 ND 3.6 J 1.7 J Selenium Silver Thallium 0.28 J HD ND HD RD ND 72 Zinc 81.5 191 63.6 62.7 57.9 81.7 194 2750 261 5.4 J 8.8 J

NOTES: J - Detected below reporting limit or is an estimated concentration.

ND - Not detected.

^{** -} Results reported in ug/l.

TABLE 9: SUMMARY OF PRIORITY POLLUTANT METALS TESTING - TEST PIT RESULTS L.E. CARPENTER, WHARTON, NEW JERSEY.

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													FIELD	**	
SAMPLE ID:	I TP-48	1	TP-63	ı	TP-64	ļ	TP-65	ł	TP-66	ŧ	TP-67	1	BLANK		1
DATE SAMPLED:	1 4/5/89	ı	4/5/89	1	4/5/89	1	4/5/89	1	4/5/89	1	4/5/89	ì	4/5/89		ı
SAMPLE DEPTH (feet):	1 5.5 - 6.0	0 1	7.5 - 8.0	1	8.5 - 9.0	ŧ	8.5 - 9.0	ı	7.5 - 8.0	1	3.0 - 3.5	t			1
	=======	== :	========	=	*********	= =		: :	22222222	=	========	: =	======	===	1
PARAMETER	1	1		ı		ŧ		i		1		ŧ			i
(mg/kg)	i	ı		ı		ı		ı		İ		ı			1
	1	ı		ł		1		ŧ		1		ı			1
Antimony	1 7.4 J	ı	ND	ı	ND	ı	ND	t	ND	ı	38.7	ı	HD		ı
Arsenic	1 4.2	1	3.3	į	3.6	ŧ	3.3	ı	0.91 J	ł	3.4	L	ND		1
Beryllium	l 1.1 J	ı	0.96 J	1	1.1 J	ı	0.86 J	:	0.62 J	ı	1.1 J	: -	1.2 J		ı
Cadaiua	I ND	1	98.9	ı	ND	ı	ND	ı	ND	ı	2	I	ND		ı
Chronium	1 21.9	1	12.2	ı	19.1	ı	10.7	1	6.1	ı	27.9	1	ND		ľ
Copper	1 15.2	ı	21	ı	18.5	ł	21.2	ı	10.3	ı	44.3	ı	6.8 J		ı
Lead	1 36.4	- 1	21.6	ı	8.7	ı	8.6	ı	2.6	ı	124	ı	ND	-	ı
Mercury	l RD	1	0.1	ı	ND	ı	ND	l	ND	ı	1	ı	ND	1	1
Nickel	1 11.9	1	10.4	1	12.2	ı	11.4	ı	4.6 J	1	14.9	ı	RD	ļ	l
Selenium	I RD	ı	0.95 J	ı	ND	ı	ND	ı	ND	ı	0.81 J	ı	HD		Į
Silver	l ND	1	1.1 J	ı	1.1 J	ı	1 J	I	1.2 J	ŀ	1.8 J	ı	4.3 J	1	1
Thallium	i RD	1	RD	ı	ND	ı	RD	ı	ND	f	ND	I	ND	1	ı
Zinc	61.4	ı	67.2	ı	41.6	i	48.9	ı	32.9	ı	234	ı	30		1
	1	1		i		ı		1		1		ı			ļ

HOTES: J - Detected below reporting limit or is an estimated concentration.

ND - Not detected.

^{** -} Results reported in ug/l.

TABLE 9: SUMMARY OF PRIORITY POLLUTART METALS TESTING - TEST PIT RESULTS L.E. CARPENTER, WHARTOR, NEW JERSEY.

4 of 5

SAMPLE ID: DATE SAMPLED: SAMPLE DEPTH (feet):	 	TP-50A 4/10/89 0 - 0.5	 -	TP-50B 4/10/89 3.0 - 3.5	 -	TP-51A 4/10/89 0 - 0.5	 -	TP-51B 4/10/89 3.5 - 4.0] -	4/10/89		TP-53 4/10/89 2.5 - 3.0		TP-54 4/10/89 2.0 - 2.5		FIELD BLANK 4/10/89	1 1
PARAMETER	1		 		1		1		1		1		i I		i		į
(ng/kg)	;	RD		0.2	1	ND	i	ND	1	ND	1	ND	ï	ND	i	ND	i
Phenolics, total	:	ND	ï	ND	;	ND	i	1.2	ï	ND	ï	0.63	i	1.4	i	ND	i
Cyanide	:	RD	:	WD	i	NU	i	1.2	1	NV	i	0.03	i	***	i	ris.	i
HETALS	i		i		i		i		i		i		i		i		i
Antimony	i	7.9 J	i	23.4	i	55.6	i	15.1	i	ND	i	ND	i	9.1 J	ì	ND	i
Arsenic	i	3.6	i	6.4	i	6.7	i	7.1	i	2.4	i	2.2 J	ì	15.5	i	ND	i
Beryllium ·	i	0.7 J	i	0.78 J	i	0.93 J	i	0.73 J	i	0.54 J	i	0.45 J	i	0.91 J	ı	HD	i
Cadaius	i	1.8	i	1.3	i	RD	i	1 J	i	1 J	i	RD	i	ND	i	ND	i
Chronius	i	16.5	i	21.8	Ì	19	i	17.4	i	20.9	i	10.2	ı	12.6	1	ND	1
Copper	i	53.5	i	39.5	i	31.6	i	33.8	ı	11.3	ı	19.4	t	48.4	ı	RD	1
Lead	i	166	i	124	ı	85	ı	77.8	ı	17.5	ı	39.9	Į	146	ı	ND	1
Mercury	ı	1.5	ı	1.9	ı	1.8	1	2.6	ı	1	1	4.1	ı	6.8	1	RD	1
Rickel	ŧ	9.5	1	10.1	ŧ	10.1	1	12.3	ı	6.3 J	ı	8.4 J	1	10.8 J	1	ND	1
Selenium	ı	ND	ŧ	HD	ı	ND	ı	ND	ŧ	ND	1	ND	ı	0.43 J	ı	ND	1
Silver	ı	RD	1	MD	ı	ND	I	ND	ı	ND	ı	ND	1	RD	ı	RD	1
Thallium	1	HD	ı	ND	ı	ND	1	RD	l	RD	1	ND	ı	ND	1	HD	1
Zinc	ı	234	1	170	ı	148	i	127	ı	34.6	ı	72.3	ł	215	ı	7.6 J	1
	1		ı		1		ı		1		1		ı		ı		1

NOTES: J - Detected below reporting limit or is an estimated concentration.

ND - Not detected.

** - Results reported in ug/l.

TABLE 9: SUMMARY OF PRIORITY POLLUTANT METALS TESTING - TEST PIT RESULTS L.E. CARPENTER, WHARTON, NEW JERSEY.

5 of 5

																		FIELD	• •	FIELD	•	FIELD 4	**
SAMPLE ID:	l	TP-68	1	TP-69	1	TP-70	ł	TP-71	ı	TP-72	-1	TP-73	- 1	TP-74	1	TP-75	1	BLANK	1	BLANK	İ	BLANK	ı
DATE SAMPLED:	ı	4/4/89	1	4/4/89	1	4/4/89	1	4/5/89	1	4/10/89	- 1	4/10/89	-1	4/10/89	1	4/5/89	1	4/5/89	- 1	4/4/89	-	4/10/89	1
	1 7	7.5 - 8.0	1	5.5 - 6.0	1	7.5 - 8.0	ı	5.0 - 5.5	1	6.0 - 6.5	5 1	7.5 - 8.0)	6.5 - 7.0	1	7.5 - 8.0	1		-1		1		1
***************************************	==		= =	*******	= =		= =	========	=		=	=======	=	********	=	*********	= =	=======	:= :		= =	=======	:=
PARAMETER	1		ı		1		ŧ		١		1		-1		1		ı		1		1		1
(mg/kg)	ı		ı		1		ı		1		1		1		1		i		ı		1		1
	ı		1		ı		1		ı		1		1		1		1		i		ı		1
Antimony	1	RD	ı	51.9	ı	ND	1	19.2	1	15.8 J	ı	ND	1	42.3	ı	RD	ı	HD	ı	RD	ı	ND	1
Arsenic	ı	3.3	1	26.8	1	1.8 J	1	5.6	ı	4.4	F	3.6	١	3.9	1	1.8 J	ı	ND	1	KD	1	ND	ı
Beryllium	t	1 J	1	1.3	ı	1.5	ı	1.4	ı	0.65 J	1	0.42 J	-1	0.83 J	i	0.8 J	ı	1.2 J	1	1.2 J	1	RD	1
Cadnium	1	HD	1	HD	ı	ND	1	1.3	ı	3.1	I	ND	1	3.7	1	ND	1	HD	-1	RD	1	RD	1
Chronium	t	15.4	1	18	ı	17.9	1	24.8	ı	23.1	1	9.5	1	30.6	ı	11.6	1	HD	- 1	ND	1	ND	1
Copper	ı	30.6	1	77.8	ı	30.5	1	66.2	ı	129	ı	15.8	1	30.4	ŀ	19.2	1	6.8 J	-1	13.3 J	1	ND	ŧ
Lead	1	36.8	1	204	ı	97.2	ı	229	1	203	1	9.5	-1	154	1	7.2	ı	ND	1	ND	1	ND	1
Hercury	ı	0.5	1	38	ı	0.1	t	0.5	ı	1.4	1	RD	İ	0.3	ł	RD	1	ND	ı	RD	1	ND	1
Rickel	ı	11.7	1	25.9	ı	13.2	ı	9.3 J	1	45.3	ŀ	10.2	-1	10.2	ı	14.1	1	RD	ı	ND	1	ND	ı
Selenium	ı	ND	ı	0.46 J	ı	0.35 J	1	0.59 J	1	0.41 J	1	ND	ı	HD	1	ND	1	ND	ı	ND	1	ND	1
Silver	ı	1.2 J	1	2.2 J	1	1.5 J	ı	1.2 J	l	ND	ı	ND	-1	ND	ı	1.1 J	ı	4.3 J	Į	4.5 J	1	ND	ı
Thallium	ı	ND	1	ND	ı	HD	ı	ND	1	RD	ı	ND	1	ND	ı	HD	1	MD	1	ND	ı	ND	1
Zinc	1	74.1	1	175	ı	89.1	ł	149	1	502	1	35	1	316	1	44.4	1	30	1	28.8	1	7.6 J	ı
Cyanide	ı	HD	ı	ND	ŧ	HD	t	KD	ı	HD	1	ND	1	ND	ı	RD	ı	ND	ı	RD	ı	ND	ı
	ŀ		1		ı		ı		1		1		ı		1		1		1		ı		1

 $\mbox{{\tt HOTES:}}\ \ \mbox{{\tt J}}\ \mbox{{\tt -}}\mbox{{\tt Detected below reporting limit or is an estimated concentration.}}$ $\mbox{{\tt ND}}\ \mbox{{\tt -}}\mbox{{\tt Not detected.}}$

^{** -} Reported in ug/l.

TABLE 10

SUMMARY OF PRIORITY POLLUTANT ORGANOCHLORINE PESTICIDES/ PCBS TESTING - TEST PIT RESULTS

1027WG.FM

TABLE 10: SUMMARY OF PRIORITY POLLUTANT ORGANOCHLORINE PESTICIDES/PCBs TESTING - TEST PIT RESULTS

EPA METHOD 8080

L.E. CARPENTER, WHARTON, NEW JERSEY.

GeoEngineering, Inc. Rovember 1989

1 of 5

																	FIELD .	•	FIELD		FIELD 4	**
SAMPLE ID:	I TP-	18 •	I TP	~1B •	I TP-2A		TP-2B	1	TP-3A	1	TP-3B	ı	TP-4A	1	TP-4B	1	BLANK	İ	BLANK	1	BLANK	!
DATE SAMPLED:	1 8/3	/89	1 8/	3/89	1 3/23/8	9 1	3/23/89		1/22/89		3/22/89		3/22/89		3/22/89		3/22/89	ļ	3/23/89	! !	B/3/89	Ţ
SAMPLE DEPTH (feet):			1 4.0				1.7	-	- 0.5		1.5 - 5.0			-	.5 - 5.0			1		!		1
	=====	252222	====	255555	=======	===	========	= ===		= =:	::::::::::	==	********	: ==	=========	= ==	========	= 1=	========	j==:		:=
PARAMETER	l		I		1	ı		1		!		1 -		ļ		ļ		i		!		•
(ug/kg)	ŀ		1		ľ	į	,	1		1		ı	•	i		ļ		ļ		!		
	1		1		l	ı		1		!		!		i		!	***	!	100	1	WP.	1
alpha-BHC	1 18			ND	1 110	!	ND	!	HD	!	RD	!	ND	i	HD	I	ND	!	ND	!	ND ND	1
beta-BRC	i N			RD	I RD	ļ	RD	ļ	HD	!	ND	!	RD	!	ND	i	HD	!	ND ND		ND ND	-
delta-BHC	1 10			ND	i ND	ļ	ND	l .	ND	!	HD	!	ND	!	HD	!	ND		ND			!
gamma-BHC (Lindane)	I M	-	-	ND	I ND	,	ND	!	HD	ļ	KD	!	ND	!	RD		ND	!	KD		ND ND	!
Heptachlor	i N	_		ND	I ND	I	ND	I	RD	!	ND	1	ND	!	HD	!	ND	!	ND	!	KD	
Aldrin	1 18			ND	1 ND	ŀ	ND	ı	ND	!	ND	ľ	ND	i	ND	!	ND	!	ND	!	ND	
Heptachlor epoxide	l H			ND	l ND		KD	ŀ	ND	!	ND	Ţ	ND		ND	!	ND	!	ND	!	ND	!
Endosulfan I	R	_	•	RD ·	I ND	-	ND		- KD	!	RD .	L	- AD	!	HD	!	BD BD	!	. KD	!	ND	!
Dieldrin	1 1			HD	i KD	ı	ND	!	HD	!	ND	!	ND	!	ND	!	ND	!	ND		ND	
4,4'-DDE	I M			ND .	i ND	ŀ	ND	!	ND	!	ND	!	ND		ID	!	ND	!	HD	ı	ND	- !
Endria	i N			RD	l ND	ı	ND	ı	KD	!	HD	I	ND	!	RD	!	ND	!	RD		ND	!
Endosulfan II	l Al	-	•	ND	i ND	- 1	ND	1	ND	!	ND	I	ND	i	ND	!	ND	!	RD	!	RD	1
4,4'-DDD	l XI			ND	I RD	ı	ND	!	RD	!	ND	!	RD	i	ND	•	ND	!	ND	!	RD	!
Endosulfan sulfate	I M			ND	I RD	. !	RD	ı	HD	!	RD	!	ND	1	HD	1	RD	!	KD	!	ND	!
4,4'-DDT				ND	l ND		ND '	1	ND	1	ND		KD	Ī	ND	!	ND	!	ND	!	ND	
Endrin aldehyde	i M	-	•	ND	I ND	ŀ	ND	ı	ND	!	ND	!	ND	!	HD	!	ND	!	MD	!	ND	!
Methoxychlor	l N			KD	i ND	- 1	ND	!	ND	!	ND	i	ND	!	RD	!	ND	!	ND	l	ND	1
Chlordane	! 11			ND	I ND	!	ND	1	ND	ı	RD	!	ND	!	RD	!	ND	!	ND	!	RD	Ţ
Toxaphene	l Ri			ND	I RD	- 1	ND	1	ND	ı	KD	1	ND	!	ND	!	ND	i	RD	1	ND	1
Aroclor-1016	1 11			ND	ND ND		ND	1	ND	!	ND	!	HD	1	ND	!	ND	!	ND	ı	KD	I.
Aroclor-1221	i M			ND .	i nd	1	ND	ŧ	ND	ı	ND	1	ND	Ī	ND	!	ND	1	ND	1	ND	ı
Aroclor-1232	i Ni			RD	I ND	1	ND	ı	ND	ı	ND	l	ND	1	HD	!	ND		RD	ı	ND	ı
Aroclor-1242	i Ri			ND	i nd	1	ND	ŧ	ND	ı	ND	ı	ND	1	RD	!	ND	i	RD	ı	ND	ŀ
Aroclor-1248	ı di			ND	i ND	1	ND	ı	ND	ı	RD	!	ND	1	ND	!	RD	1	ND	l	ND	ļ
Aroclor-1254	i ni			ND	7500	1	12000	1	14000	1	HD	I	490 J	İ	1600	!	ND	Ţ	KD	l	ND	ı
Aroclor-1260	l Ri)	1	970	I ND	1	ND	!	RD	!	ND	ļ	ND	!	RD	!	ND	!	RD		ND	Į

NOTES: J - Detected below reporting limit or is an estimated concentration.

ND - Not detected.

- Samples obtained by soil boring at MW-13s location.
 - Analyzed by EPA Method 600 and reported in ug/l.

TABLE 10: SUMMARY OF PRIORITY POLLUTANT ORGANOCHLORINE PESTICIDES/PCBs TEST PIT RESULTS

EPA METHOD 8080

L.E. CARPENTER, WHARTON, NEW JERSEY.

Geo Engineering, Inc. June 1989

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																		FIELD .	•
SAMPLE ID:	1	TP-5A	ı	TP-5B	t	TP-6A	ı	TP-6B	•	TP-7A	ı	TP-7B	ı	TP-8A	1	TP-8B	1	BLANK	-
DATE SAMPLED:	•	3/23/89	-	3/23/89	i	3/23/89	•	3/23/89		3/23/89	1	3/23/89	1 :	3/23/89	1	3/23/89	1	3/23/89	1
SAMPLE DEPTH (feet):	•	0 - 0.5		.0 - 4.5	1	0 - 0.5	1 3	3.5 - 4.0	1	0 - 0.5	1 4	.0 - 5.0	Į, (0.5	1 2	.5 - 3.0	ı		1
	= ==	=======	==:		= ==	*******	= ==		==	=======	 ==		==:	=======	==	2222222	= = =		=
PARAMETER	1		İ		1		1		1		!		t i		ı		i		1
(ug/kg)	1		1		1		ı		l		1		ı		ı		ı		ı
	1		ı		ı		ı		ı		1		l		1		1		1
alpha-BHC	1	ND	ŀ	ND	ı	ND	t	ND	ı	ND	1	ND	ł	ND	ı	RD	ı	ND	1
beta-BHC	1	ND	ı	M	ı	ND	ı	ND	ı	ND	l	ND	ł	ND	ţ	ND	1	MD	1
delta-BHC	!	MD	1	ND	ı	MD	ı	MD	ł	ND	ı	ND	l	ND	ı	ND	1	MD	1
gamma-BHC (Lindane)	1	ND	ļ	ND	ı	MD	1	RD	1	ND	1	ND	ı	ND	•	ND	1	MD	1
Heptachlor	ı	RD	I	ND:	1	ND	1	ND	1	ND	ŀ	ND	ı	ND	ı	RD	1	MD	1
Aldrin	1	ND	1	ND .	ŧ	ND	1	MD	ı	ND	ı	RD	ı	ND	ı	·ND-	ŀ	MD	ı
Reptachlor epoxide	ŀ	ND	1	MD	1	MD	1	ND	l	RD	ļ	ND	1	RD	ŧ	ND.	ı	m	ı
Endosulfan I	1	ND	1	RD	1	ND	1	RD .	ı	ND	t	ND	ı	ND	ı	ND	ı	ND	1
Dieldrin	1	HD	ı	ND	1	ND	l	ND	į	ND	1	ND	ı	ND	ŧ	ND	t i	IID	1
4,4'-DDE	1	KD	ı	ND	ı	ND	ı	HD :	ł	ND	1	ND	ı	ND	ı	ND	t	ND	F
Endrin	ı	ND	1	ND	1	ND	ı	RD	ı	ND	ı	ND	ı	ND	1	ND	1	ND	1
Endosulfan II	1	ND	ŀ	MD	ı	ND	ı	ND	ı	ND	ı	RD	ı	ND	ı	ND	1	MD	1
4,4'-DDD	ı	ND	i	RD	1	ND	1	ND I	I	ND	1	ND	l	ND	ı	ND	1	MD	1
Endosulfan sulfate	1	KD	ı	RD	1	ND	1	ND 1	t	RD	l	RD	1	ND	ı	ND	1	KD	1
4,4'-DDT	1	RD	ı	ND	1	ND	1	HD 1	ı	ND	ı	RD	1	ND ·	ı	RD	1	ND	1
Endrin aldehyde	1	RD	1	· ND	ı	RD	1	ND !	l	ND	1	RD :	1	ND	ı	ND	1	ND	ı
Methoxychlor	ı	ND .	1	ND	1	ND	1	ND 1	1	ND	l	ND	1	ND	l	RD	1	ND	ı
Chlordane	1	RD	1	KD	1	ND	ı	RD I	}	ND (ı	RD	l	RD	i	ND	ı	ND	ı
Toxaphene	i	HD	j	RD	l	ND	1	ND I	!	ND	l	ND I	1	ND	1	ND	ı	ND	1
Aroclor-1016	1	RD .	1	RD	ı	RD	ı	ND I	1	ND	ŀ	ND I	1	ND	1	ND	ı	MD	1 .
Aroclor-1221	1	ND	1	ND	i	ND	ı	ND I	1	ND (t	ND 1		ND :	1	ND	1	RD	İ
Aroclor-1232	1	MD [1	ND	ı	RD	ı	ND I	ì	ND (l	ND (ND)	ND	i	KD	i
Aroclor-1242	ı	ND I	1	ND	ı	ND	1	ND I	1	ND I	1	ND 1		ND :	1	ND	ı	KD	i
Aroclor-1248	1	ND	1	ND	ı	ND	1	ND I	1	ND I	1	ND I		ND	1	ND	ı	ND	í
Aroclor-1254	1	ND I	}	ND	ı	300 J	1	ND I		ND I	1	ND 1		ND I	1	ND		KD	í
Aroclor-1260	ı	ND !	1	ND	ł	ND	1	ND 1		ND I	1	ND I		ND		ND	ĺ	HD	i

NOTES: J - Detected below reporting limit or is an estimated concentration. ND - Not detected.

** - Analyzed by EPA Method 608 and reported in ug/l.

TABLE 10: SUMMARY OF PRIORITY POLLUTANT ORGANOCHLORINE PESTICIDES/PCBs TESTING - TEST PIT RESULT EPA METHOD 8080

L.E. CARPENTER, WHARTON, NEW JERSEY.

GeoEngineering, Inc. November 1989 3 of 5

					FIELD .	•
SAMPLE ID:	TP-9A	ı	TP-9B	ı	BLANK	1
DATE SAMPLED:	3/27/89	ı	3/27/89	ı	3/27/89	1
SAMPLE DEPTH (feet):	0 - 0.5	ı	2.0 - 2.5	l		1
F013133310011111301143014411111111111111	=======	:= =	*********	=	******	=
PARAMETER	1	1		ŧ		1
(ug/kg)	i	-		1		1
!	!	-		t		1
alpha-BHC i	i MD	ŧ	ED	ı	ND	1
beta-BHC i	T MD	1	RD	ı	HD	1
delta-BHC	i RD	1	ND	1	ND	1
gamma-BHÇ (Lindane)	RD RD	1	RD	l	ND	t
Heptachlor I	ND	ŀ	MD	i	ND:	ľ
Aldrin	ND	1	MD	ı	HD	1
Reptachlor epoxide	HD	ı	RD	L	ND	1
Endosulfan I	I ITD	ı	RD	1	MD	1
Dieldrin	i nd	ı	ND	l	ND	1
4,4'-DDE	RD RD	ı	ND	ı	RD	ł
Endrin	ND ND	ł	ND	ı	ND	ı
Endosulfan II	HD	ł	HD	ì	ND	١
4,4'-DDD	ND	ı	ND	1	ND	1
Endosulfan sulfate	HD	ı	ND	ı	ND	1
4,4'-DDT I	ND	1	ND	1	MD	ŧ
Endrin aldehyde	ND	1	RD	1	RD	1
Methoxychlor	ND	1	ND	1	ND	1
Chlordane	ND	1	ED	ı	ND	ı
Toxaphene	ND	ı	ND	ı	MD	ŀ
Aroclor-1016	ND	1	ND	ı	ND	ı
Aroclor-1221	ND .	ı	ND	1	ND	1
Aroclor-1232	ND	ı	ND	ı	ND	ı
Aroclor-1242	ND	ı	KD	ı	RD	1
Aroclor-1248	ND	ı	ND	ı	ND	1
Aroclor-1254	1700	ı	ND	ı	RD	1
Aroclor-1260 †	ND	1	KD	ı	ND	1

NOTES: J - Detected below reporting limit or is an estimated concentration.

ND - Not detected.

^{** -} Analyzed by EPA Nethod 608 and reported in ug/l.

TABLE 10: SUMMARY OF PRIORITY POLLUTANT ORGANOCHLORINE PESTICIDES/PCBs TESTING - TEST PIT RESULTS EPA METHOD 8080

L.E. CARPENTER, WHARTON, NEW JERSEY.

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																FIELD **	
SAMPLE ID:	1	TP-50A	1 1	P-50B	1	TP-51A	1 :	TP-51B	ı	TP~52	I	P-53	1	TP-54	1	BLANK	1
DATE SAMPLED:	1	4/10/89	1 4	/10/89	ı	4/10/89	1 4	4/10/89	1 4	/10/89	1 4/	10/89	1	4/10/89	1.4	/10/89	1
SAMPLE DEPTH (feet):	1	0 - 0.5	1 3.	0 - 3.5	•	0 - 0.5	1 3	.5 - 4.0	1 4.	0 - 4.5	1 2.5	- 3.0	1 2	.0 - 2.5	1		ı
200000000000000000000000000000000000000	= =	::::::::	1===		: ==		==:		===		====	======	: ==:	========	===	******	t
PARAMETER	ı		1		1		1		1		۱.		ı		1		ı
(ug/kg)	1		1		ı		1		ı		ı		ı		l		l
	1		1		ı		t		İ		ı		i		1		I
alpha-BHC	ı	ND	ı	ND	1	ĦD	1	ND	ł	ND	-	ND	ı	ND	1	RD	ı
beta-BHC	t	ND	1	ND	ı	HD	1	HD	ı	ND	•	RD	ı	HD	1	RD .	ı
delta-BHC	ı	ND	1	RD	1	HD	1	ND	ı	ND :	-	ND	ı	ND	ı	ND	ı
gamma-BHC (Lindane)	1	RD	1	ND	1	MD	ı	RD	1	ND	-	HD	ı	ND	1	ND	l
Heptachlor	ļ	ND	1.	RD	ı	ND	1	ND:	ł	ND	•	RD	1	ND	1	ND	ł
Aldrin	1	ND	ı	KD	ı	RD	i	HD	ı	ND	-	ND	İ	ND	1	RD	1
Heptachlor epoxide	1	ND	1	KD	ı	ND .	1	ND	ļ	RD	•	RD	!	ND_	!	ND	ŀ
Endosulfan I	ı	ND	ı	ND	ı	MD	ı	ND	1	ND	•	ND	1	ND	1	ND	l
Dieldrin	ı	ND	ı	RD	ı	ND	1	ND	l	RD	•	KD	1	ND	İ	RD	ı
4,4'-DDE	ı	HD	1	KD	ı	ED	1	79	ı	HD	-	ND	l .	ND	1	ND	t
Endrin	ı	HD	ı	RD	1	KD	ı	ND	ı	ND		MD	I	ND	1	ND	1
Endosulfan II	ı	ND	1	RD	ı	ND	ı	KD	i	ND	•	RD	1	MD	1	ND	ı
4,4'-DDD	ı	ND	ı	ND	ı	ND	1	270	1	RD	•	ND	1	ND	١	RD	1
Endosulfan sulfate	ı	ND	1	ND	ı	ND	ı	RD	ı	ND	-	ND	!	ND	1	ND	ı
4,4'-DDT	ı	ND	ı	ND	1	MD	ı	ND	i	ND		ND	ı	ND	1	ND	ł
Endrin aldehyde	ı	ND	1	ND	1	HD	1	RD	l	ND		HD	!	ND	1	HD	ı
Methoxychlor	1	ND	ı	RD	ı	KD	ı	ND	ı	ND	•	ND	I	ND	ı	RD	1
Chlordane	ı	HD	ı	ND	1	ND	ı	ND	l	RD		RD	1	ND	1	ND	ı
Toxaphene	ı	ND	l	ND	!	RD	ļ	RD	1	ND.		ND	ļ	ND	!	ND	!
Aroclor-1016	1	ND	ı	RD	ı	RD	ı	RD	ı	ND		RD	I	ND	ı	ND	ı
Aroclar-1221	ı	ND	1	ND	ı	ND	1	ND	ı	ND I		ND	1	ND	ı	HD	ı
Aroclor-1232	1	RD	1	ND	1	ND	•	ND	ı	ND I		ND	!	RD	ı	RD	l
Aroclor-1242	1	ND	1	RD	!	ND	1	ND	i	ND !		ND	1	ND	I	AD	1
Aroclor-1248	ı	ND	1	KD	1	ND	1	ND	I	RD (HD	I	ND	1	RD	I
Aroclor-1254	!	2900	!	320	1	530 J	!	ND	!	ND	-	50 J	!	240 J	ļ	HD	ı
Arocler-1260	ı	ND	ı	ND	ı	ND	1	ND	i	ND		RD	ı	ND	i	RD	1

NOTES: J - Detected below reporting limit or is an estimated concentration.

ND - Not detected.

^{** -} Analyzed by EPA Method 608 and reported in ug/l.

TABLE 10: SUMMARY OF PRIORITY POLLUTANT ORGANOCHLORINE PESTICIDES/PCBs TESTING - TEST PIT RESULTS EPA METHOD 8080

L.E. CARPENTER, WHARTON, NEW JERSEY.

GeoEngineering, Inc. November 1989

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							FIELD	FIELD **	
SAMPLE ID:	TP-69	I TP-70	I TP-71	1 TP-72	I TP-73	I TP-74	I BLANK	I BLANK I	ı
DATE SAMPLED:	4/4/89	1 4/4/89	1 4/5/89	1 4/10/89	1 4/10/89	1 4/10/89	1 4/4/89	1 4/10/89	ı
SAMPLE DEPTH (feet):	5.5 - 6.0	1 7.5 - 8.0	1 5.0 - 5.5	1 6.0 - 6.5	17.5 - 8.0	1 6.5 - 7.0	1	1 1	ı
************************************	********* =========	. ========	: ========		ı
PARAMETER		1	1	1	1	1	1	1	ł
(ug/kg) I		T .	I	1	1	1	1	1	ł
ı		I	1	1	1	1	1	1 1	ı
alpha-BHC !	RD	i nd	I ND	I ND	I ND	I ND	I ND	! ND I	l
beta-BHC I	RD	i KD	I ND	I ND	t RD	I ND	l ND	I ND I	ı
delta-BHC	ND .	t MD	I ND	I ND	1 ND	I ND	i ND	I ND I	l
gamma-BHC (Lindane) !	ND	I KD	I RD	1 HD	I RD	i ND	I ND	I ND I	l
Heptachlor I	ND	I ND	I ND	I ND	I ND	I ND	I ND	I ND I	ı
Aldrin	HD	i ND	1 ND	I ND	I ND -	I RD	I ND	I ND I	l
Heptachlor epoxide	ND	I RD	1 ND	I ND	1 ND	t ND	t RD	I ND I	l
Endosulfan I	ND	1 ND	I ND	I ND	1 ND	I ND	i ND	I ND I	ì
Dieldrin t	ND	I ND	I RD	I ND	I ND	I ND	I ND	I ND I	ì
4,4'-DDE 1	- ND	I RD	I RD	I ND	I RD	i nd	I BD	I ND I	1
Endrin i	ND	1 ND	I ND	I ND	I ND	I ND	I ND	I ND I	į
Endosulfan II :	ND	i ND	i ND	i ND	I KD	l ND	I ED	I RD I	i
4,4'-DDD !	HD	I ND	I RD	i ND	i ND	i ND	i ND	I ND I	j
Endosulfan sulfate !	ND	1 RD	I ND	I ND	i ND	i ND	I RD	I ND I	1
4,4'-DDT !	ND	l ND	I ND	1 ND	I ND	I ND	I ND	I ND 1	j
Endrin aldehyde	ND	! KD	I ND	1 ND	I ND	i ND	! ND	I ND !	l
Hethoxychlor I	ND	f ND	I ND	I ND	I ND	I ND	I ND	I CR I	ı
Chlordane I	KD	1 ND	I ND	I ND	i ND	i ND	! ND	I ND I	j
Toxaphene !	ND	I ND	I ND	I ND	I ND	i ND	I ND	I ND I	1
Aroclor-1016	ND	I ND	i ND	T MD	I ND	i ND	l ND	i ND i	i
Aroclor-1221	ND	i ND	I ND	I RD	I ND	I ND	l RD	t CH I	1
Aroclor-1232	ND	l ND	I RD	I ND	I ND	I ND	l ND	i ND i	J
Aroclor-1242	MD	I ND	l ND	I ND	i KD	I ND	I ND	I ND I	J
Aroclor-1248	HD	i ND	I ND	i ND	I MD	! ND	l ND	i ND i	J
Aroclór-1254	RD	I ND	i ND	I ND	I ND	I ND	I ND	I ND I	
Aroclor-1260	HD	l ND	I ND	I ND	I ND	l ND	I ND	I MD I	

NOTES: J - Detected below reporting limit or is an estimated concentration.

ND - Not detected.

^{•• -} Analyzed by EPA Method 608 and reported in ug/l.

TABLE 11

SUMMARY OF TOTAL PETROLEUM HYDROCARBON AND HYDROCARBON FINGERPRINT TESTING - TEST PIT RESULTS

TABLE 11: SUMMARY OF TOTAL PETROLEUM HYDROCARBON AND HYDROCARBON FINGER PRINT TESTING - TEST PIT RESULTS BY ASTM METHOD D3328 L.E. CARPENTER, VMARTON, NEW JERSEY.

GeoEngineering, Inc. November 1989

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Sample	Date Sampled	Sample Depth (feet)	TPH Results ((ug/g)	Total Hydrocarbon I (ug/g)	Qualitative Identification
TP-30	1	I I 4.5 - 5.0	1	l 1 12000	"characteristics that are similar to resolved polar components in the n-ClO to n-C3O range."
TP-31	1 3/28/89 1	1 7.0 - 8.0	! ! !	1 5500 1	*characteristics that are similar to resolved polar components in the n-C10 to n-C30 range.*
TP-32	1 3/28/89 1	 3.5 - 4.0 		l 20000 l	<pre>! ! "characteristics that are similar to resolved polar ! components in the n-C10 to n-C32 range."</pre>
TP-33	1 3/28/89 1	1 7.5 - 8.0 1 7.5 - 8.0		I I 760 I	<pre>1 *characteristics that are similar to resolved polar 1 components in the n-ClO to n-C3O range.*</pre>
TP-34	1 3/28/89 !	7.0 - 8.0 (! 8100 !	! "characteristics that are similar to resolved polar ! components in the n-ClO to n-C36 range."
TP-35	3/29/89 !	4.5	420	 	 1
TP-36	1 3/29/89 1 3/29/89	4.5 4.5	230	 !	
TP-37	i 3/28/89 i 3/28/89	 4.5 - 5.0 		8100	 "characteristics that are similar to a mixture of petroleum product in the fuel oil/lubricating oil range and a resolved
TP-38	 3/29/89 		380 (polar component in the nC24 to nC34 range.
TP-39	i. 1 3/30/89 i 1 1	2.5 I	100 I]
TP-40 i		7.5 I	RD I		-
TP-41	3/29/89 I	4	360 I 1	i	
Field Blank 	3/28/89 	- !	I	. 0.04 •	
Field Blank	3/29/89 I	I	100 + 1 1	I	· •••
i Field Blank i	3/30/89 I	1	i + CR	- i	

HOTES: • - Reported in mg/l.

TP-37 sampled 3/28/89; TP-39 sampled 3/30/89.

^{-- -} Not Applicable.

⁻ TP-39 analytical results reported as TP-37 due to labelling error in the field.



SUMMARY OF VOLATILE ORGANICS ANALYTICAL TESTING - HAND AUGER RESULTS

1027WG.FM

Page 1 of 3

L.E. CARPENTER, WHARTON, NEW JERSEY.

SAMPLE ID: Date Sampled: Sample Depth (feet):	HA-1 # 3/27/89 .5 - 1.0	HA-2 3/23/89 .575	HA-3 3/23/89 .583	HA-4 3/22/89 .5 - 1.0	HA-5 3/22/89 .575	HA-6 3/22/89 .575	HA-7 3/22/89 .575	HA-8 3/22/89 1.583	BLANK 3/22/89	FIELD * BLANK 3/23/89	TRIP BLANK 3/22/89	TRIP ** BLANK 3/23/89
PARAMETER (ug/kg) Chloromethane Bromomethane Vinyl chloride Chloroethane Methylene chloride 1,1-Dichloroethane 1,2-Dichloroethane 1,2-Dichloroethane 1,1-Trichloroethane Carbon tetrachloride Bromodichloromethane 1,2-Dichloropropane trans-1,3-Dichloropropene Trichloroethene Dibromochloromethane 1,1,2-Trichloroethane 2-Trichloroethane 1,1,2-Trichloroethane 1,1,2-Trichloroethane 1,1,2-Trichloroethane 2-Chloroethyl vinyl ether Bromoform 1,1,2,2-Tetrachloroethane Tetrachloroethene Toluene Chlorobenzene Ethylbenzene Xylenes (total) @ TOTAL TARGETED VOC ***	ND ND ND ND ND ND ND ND ND ND ND ND ND N	ND ND ND ND ND ND ND ND ND ND ND ND ND N	ND ND 33 ND ND ND ND ND ND ND ND ND ND ND ND ND	ND ND ND ND ND ND ND ND ND ND ND ND ND N	ND ND ND ND ND ND ND ND ND ND ND ND ND N	ND ND ND ND ND ND ND ND ND ND ND ND ND N	ND ND ND ND ND ND ND ND ND ND ND ND ND N	ND ND ND ND ND ND ND ND ND ND ND ND ND N		ND ND ND ND ND ND ND ND ND ND ND ND ND N	ND ND P P ND ND ND ND ND ND ND ND ND ND ND ND ND	7 . 1 . 1 . 2 . 2 . 2 . 2 . 2 . 2 . 2 . 2
1,1,2-Trichloro- 2,2,1-trifluoroethane Total Cyclohexane compound Total Other compounds Total Unknown compounds TOTAL NON-TARGETED VOC***	140 ND ND 28 168 #	ND 159 584 110 853	1 4 ND ND ND ND	100 ND ND ND ND	88 ND ND 60 148	110 ND ND 67 177	120 ND ND ND ND	78 ND ND ND ND 78	ND ND ND ND ND	ND ND ND ND ND	ND ND ND ND ND	ND ND ND ND ND

NOTES: J - Trace concentrations noted below detection limit.

q - Surrogate recovery outside standard QC limits.

p - Compound detected in laboratory method blank.

B - Compound detected in laboratory method blank, and sample concentration is over 5 times the method blank's.

^{# -} NJDEP Tier I sample holding time was exceeded.

^{2 -} Xylene was analyzed by the laboratory as a non-targeted compound. Xylene is listed and totaled here as a targeted compound since it is a compound of conncern at this site.

ND - Not detected.

^{** -} Analysis by EPA Method 624 and reported in ug/l.

^{*** -} Totals exclude compounds detected in method blank (p); and include compounds detected at trace concentrations (J) and (B).

TABLE 12: SUMMARY OF VOLATILE ORGANICS ANALYTICAL TESTING - HAND AUGER RESULTS BY EPA METHOD 8240 + 15

L.E. CARPENTER, WHARTON, NEW JERSEY.

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	,	.,							FIELD**	FIELD**	FIELD**	TRIP**	TRIP**	TRIP*
SAMPLE ID:	HA-9	! HA-10	! HA-11	HA-12	HA-13	HA-14	! HA-15	! HA-16	BLANK	BLANK	BLANK #	BLANK	! BLANK !	BLANK
DATE SAMPLED:	3/28/89			3/23/89	3/27/89					3/27/89	3/28/89	3/23/89	3/27/89	
SAMPLE DEPTH (feet):	5 -1.0	5 - 75	.5 -1.0	.58	.5 -1.0	.5 -1.0	.5 -1.2	.5 -1.0		-	_			_
			=======		:======:			=======		, 	:======:		:======:	
PARAMETER	•	!	!	1	!	!	!	!	!	!	!	i	1	!
(ug/kg)		<u>!</u>	!			į	•	i	i		İ	1	!	
Chilo rome thane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromomethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl chloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene chloride	160 B	46	120 B	170 B	31 JB	150 B	46 B	78 B	5.8 Jp	4.0 Jp	3.2 Jp	7.1 Jp	2.4 Jp	9.4 J
1,1-Dichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND .	ND '	ND	ND	ND .	ND
1,1-Dichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethene(total)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	, ND	ND
1,1,1-Trichloroethane	ND	ND	ND	ND	8.4 J	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon tetrachloride	ND	ND	ND	ND	ND	, ND	ND	ND	ND	ND	¦ ND	ND	, ND	ND
Bromo dich l'o rome than e	ND	ND	ND	ND	ND	ND '	ND	ND	ND	ND	ND	ND	ND :	ND
1,2-Dichloropropane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND :	ND
trans-1,3-Dichloropropene	ND	ND	ND	ND	ND	ND	ND.	ŅD	ND	ND	ND	ND	ND	ND
Trichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibromochioromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2~Trichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,3-Dichloropropene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Chloroethyl vinyl ether	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromoform	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	ND ND	ND ND	ND ND	ND 3.4 J	ND	ND ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene Chlorobenzene	ND ND	ND ND	ND ND	3.4 J ND	ND ND	ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND
	ND ND	ND ND	ND ND	1.9 J	ND	ND	ND ND	ND ND	ND ND	ND ND	ND ND		ND ND	, ,,
Ethylbenzene Xylenes (total)@	ND ND	ND ND	ND ND	ND	ND ND	ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND
TOTAL TARGETED VOC ***	160	46	120	175.3	39.4	150	46	78	ND ND	ND DN	ND #	ND ND	ND ND	ND ND
TOTAL TARGETED VOC	100	¦ 40	120	1/3.3	38.4	150	1 40	/ 0	ND	NU	i ND #	ND	NU	טא
1.1.2-Trichloro-	ł	1	•		}	:	!	1	İ	!	!	:	-	!
2.2.1-trifluoroethane	77	! 11	67	150	21	110	45	120	ND	ND	ND	ND	. ND	ND ND
Total Other compounds	ND	ND	ND	45	ND	ND	! ND	! ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND
Total Unknown compounds	ND	ND	ND	ND	ND	ND	! ND	ND	ND	ND	ND ND	ND ND	ND ND	ND ND
TOTAL NON-TARGETED VOC***	77	11	67	195	21	110	45	120	ND	ND	ND#	ND	ND	ND
TOTAL HOR TANGETED TOO	''		, ,,	, , , ,		, ,,,,	1 73	1 120	, יאט	טוי ו	יו ווט א	, 170	י און	ו ואט

NOTES: J - Trace concentrations noted below detection limit.

p - Compound detected in laboratory method blank.

B - Compound detected in laboratory method blank, and sample concentration is over 5 times above the method blank's.

^{# -} NJDEP Tier I sample holding time was exceeded.
2 - Xylene was analyzed by the laboratory as a non-targeted compound. Xylene is listed and

totaled here as a targeted compound because it is a compound of concern at this site.

ND - Not detected.

^{** -} Analyzed by EPA Method 624 results reported in ug/1.

^{*** -} Totals exclude compounds detected in method blank (p); and include compounds detected at trace concentrations (J) and (B).

BY EPA METHOD 8240+15

L.E. CARPENTER, WHARTON, NEW JERSEY.

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SAMPLE ID: Date sampled: Sample depth (feet):	HA-17 3/28/89 .5 - 1.0	HA-18 3/28/89 .5 - 1.25	HA-19 3/28/89 .5 - 1.0	FIELD ** BLANK # 3/28/89	TRIP ** BLANK 3/28/89	
PARAMETER (ug/kg) Chloromethane Bromomethane Vinyl chloride Chloroethane Methylene chloride 1,1-Dichloroethene 1,2-Dichloroethene 1,2-Dichloroethane 1,2-Dichloroethane 1,1-Trichloroethane Carbon tetrachloride Bromodichloromethane 1,2-Dichloropropane trans-1,3-Dichloropropene Trichloroethene Dibromochloromethane 1,1,2-Trichloroethane 2-Chloroethyl vinyl ether Bromoform 1,1,2-Tetrachloroethane Benzene cis-1,3-Dichloropropene 2-Chloroethyl vinyl ether Bromoform 1,1,2,2-Tetrachloroethane Tetrachloroethene Toluene Chlorobenzene Ethylbenzene	ND ND ND ND ND ND ND ND ND ND ND ND ND N	======================================	######################################	3 . 2 J p 3 . 2 J p ND ND ND ND ND ND ND ND ND ND ND ND ND	9 . 4 DD ND ND ND ND ND ND ND ND ND ND ND ND	
Xylenes (total) @ TOTAL TARGETED VOC *** 1,1,2-Trichloro-2,2,1-trifluoroethane Total Other compounds Total Unknown compounds TOTAL NON-TARGETED VOC ***	ND 28 110 ND ND	ND ND 35 P ND ND	ND 69 32 ND ND	ND # ND # ND ND ND	ND ND ND ND ND	

NOTES: J - Trace concentrations noted below detection limit.

p - Compound detected in laboratory method blank.

- NJDEP Tier I holding time was exceeded.

ND - Not detected.

** - Analyzed by EPA Method 624 reported in ug/l.

B - Compound detected in laboratory method blank, and sample concentration is at least 5 times greater than laboratory method blank concentration.

^{@ -} Xylene was analyzed by the laboratory as a non-targeted compound. Xylene is listed and totaled here as a targeted compound because it is a compound of concern at this site.

^{*** -} Totals exclude compounds detected in laboratory blank (p); and includes compounds detected at trace concentrations (J) and (B).

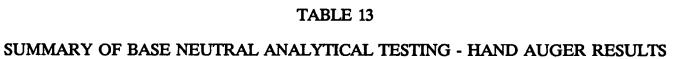


TABLE 13: SUMMARY OF BASE NEUTRAL ANALYTICAL TESTING - HAND AUGER RESULTS BY EPA METHOD 8270+15 L.E. CARPENTER, WHARTON, NEW JERSEY.

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SAMPLE C			6.							FIELD .	• FIELD	
### PARAMETER APARETER 0 - 0.5					HA-4	HA-5	HA-6	HA-7	HA-8	BLANK	BLANK	BLANK
### APAMAETER (Ug/kg)	SAMPLE DEPTH (feet):	0 - 0.5	0 - 0 5		'n - 0 5	''' - "	'n - n s	'A _ A E	10 - 0 E			
	PARAMETER	:======== :	#392322 22 }	====== 		.=======	=======	*======				========
1.3-Dichlorobensene NO ND ND ND ND ND ND ND ND ND ND ND ND ND		•	1	-	1	1	!		Ì		į	i i
1.3-Dichlorobensene NO ND ND ND ND ND ND ND ND ND ND ND ND ND	his(2-Chloroethyl)ether	ND+	No.		ND							;
1.4-District Description ND ND ND ND ND ND ND N	1.3-Dichlorobenzene	ND	ND									
Signature Sign									, ND	ND	ND	ND
Militrasor-di-n-propylamine												
	N-Nitroso-di-n-propylamine	ND	ND	ND	ND	ND						
sophorone												ND .
1.3.4	Isophorone	ND										
Maphthaises	bis(2-Chloroethoxy)methane							ND	ND	ND		
	Naphthaiene											
	Hexachlorobutadiene	ND	ND	ND	ND	, ND						
Dimethyl pinthalate												ND
Acenaphthylene ND ND ND ND ND ND ND ND ND ND ND ND ND	Dimethyl phthalate	ND	ND									
2.4-Dinitrololuene ND ND ND ND ND ND ND ND ND ND ND ND ND							ND	ND	ND	ND	ND	ND :
2.8-0 initrololuene												
4-Chiorophanyi phanyi ether ND ND ND ND ND ND ND N					ND	ND	ND	ND	ND			
Fluorene												
A-Bromophayl pinhol y and pinho	Fluorene	ND	ND	ND	ND	NĎ						
Mexach Incompanies							2500 JB					ND
Phenanthrene	Hexachiorobenzene	NÓ	ND									
Di-n-buty phthalate							ND	ND	ND .	ND	ND	
Flooranthene												
Butyl Dentyl Dentyl			ND	ND	350 J	210 J	ND	300 J	, ND ;	ND		
3.3 - Dichlorobenzidine ND ND ND ND ND ND ND ND ND ND ND ND ND												
Searco S	3.3'-Dichlorobenzidine	ND	ND	ND	ND	ND						
Chrysene												
Di-n-octy phthalate 20000 J ND ND ND ND ND ND ND	Chrysene	ND	ND									
Senzo(k) fluoranthene									ND	ND	ND	ND ;
Senzo(a) pyrene												
Diberzo(a,h)anthracene					240 J	210 J	NÚ.		ND			
Senzo(g,h,i)perylene												
TOTAL TARGETED BASE NEUTRALS NON-TARGETED BASE NEUTRALS Total Propanoic acid ND ND ND ND ND ND ND ND ND N												
NON-TARGETED BASE NEUTRALS	TOTAL TARGETED BASE NEUTRALS ***	15037000	1330000 -	184500	28490	4777	222500					
Total Propancic acid					, 20400	1 4/22	232300	4193U ;	32450	2	5.5	ND .
Total Propancic acid	NON-TARGETED BASE NEUTRALS	1	1		İ	j			i			i
Total Phthalates	Total Propanoic acid											
Total Sulfur												
Total Benzene compounds	Total Sulfur	180000	ND	ND	4500	40600	ND	1600	ND	ND ,	ND	
Total Anthracene compounds												ND
Total Naphthalene compounds												
Total Phosphoric acid 220000 ND ND ND ND 38300 ND 17500 ND ND ND Total Cyclohexane compounds 180000 ND ND ND ND ND ND ND ND ND ND ND ND ND					ND	1850	ND	ND	ND ;	ND	ND ;	ND
Total Cyclohexane compounds 180000 ND ND ND ND ND ND ND ND ND ND ND ND ND												
Total Unknown compounds 6400.00 ND 49600 ND 970 ND ND 4000 ND ND ND ND ND ND ND ND ND ND ND ND ND	Total Cyclohexane compounds	160000	ND	ND	ND		ND					
							ND		4000	ND	ND	ND
TOTAL NON-TARGETED BASE NEUTRALS; 2122000 : ND q 146800 : 14470 : 46770 : 68300 : 1800 : 34000 : ND ND 9.0	•	1	reU	A1000	1.810	1630	30000	NU	ND	ND	ND	ND
	TOTAL NON-TARGETED BASE NEUTRALS	2122000	ND q	146600	14470	46770	68300	1600	34000	ND	ND	9.0

NOTES: q - No surrogates were detected because of dilution.
J - Detected below reporting limit or is an estimated concentration.
p - Compound also detected in laboratory method blank.
B - Compound also detected in laboratory method blank, and sample concentration is at least 5 times greater than laboratory method blank concentration.
ND - Not detected.
*** - Analyzed by EPA Method 625 and reported in ug/l.
*** - Excludes compounds detected in laboratory method blank (p); includes compounds detected at trace concentrations (J) and (B).

					FIELD .
SAMPLE ID:	HA-16	HA-17	HA-18	HA-19	BLANK !
DATE SAMPLED: Sample Depth (feet):	3/28/89	3/28/89	3/28/89 0 - 0.5	3/28/89	3/28/89
=======================================			======		=======
PARAMETER (ug/kg)	i	,			
(ug/kg/					
bis(2-Chloroethyl)ether	ND ND	ND ND	ND ND	ND ND	ND ND
1,3-Dichlorobenzene 1,4-Dichlorobenzene	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	ND	ND	ND	ND	ND
bis(2-Chloroisopropyl)ether N-Nitroso-di-n-propylamine	ND ND	ND ND	ND ND	ND DN	ND ND
Hexachioroethane	ND	ND	ND	ND	ND :
Nitrobenzene	ND ND	ND ND	ND ND	ND 11000	ND ND
lsophorone bis(2-Chloroethoxy)methane	ND ·	ND	D	ND	ND
1,2,4-Trichlorobenzene	ND	ND	ND	ND	ND I
Naphthalene Hexachlorobutadiene	ND ND	ND ND	ND ND	ND ND	ND ND
Hexachiorocyclopentadiene	ND	ND	ND	ND	ND
2-Chioronapthalene	ND	ND	ND	ND	ND ND
Dimethyl phthalate Acenaphthylene	ND ND	ND ND	ND ND	ND CN	ND
Acenaphthene	ND	ND	ND	ND	ND
2,4-Dinitrotoluene	ND ND	ND ND	ND ND	ND DN	ND ND
2.6-Dinitrotoluene Diethyl phthalate	56 Jp	53 Jp	ND	1900 JB	ND
4-Chlorophenyl phenyl ether	ND	ND	ND ND	ND DN	ND ND
Fluorene N-Nitrosodiphenylamine	ND ND	ND ND	ND ND	ND	ND
4-Bromophenyi phenyi ether	ND	ND	ND	ND	ND
Hexachiorobenzene Phenanthrene	ND ND	ND ND	ND ND	ND ND	ND DN
Anthracene	ND	ND	ND	ND	ND
Di-n-butyl phthalate	ND ND	ND ND	ND ND	NO NO	ND ND
Fluoranthene Pyrene	ND	ND	ND	ND	ND .
Bûtyl benzyl phthalate	37 J	360 J	ND	68000	ND I
3.3'-Dichlorobenzidine Benzo(a)anthracene	ND ND	ND	ND ND	ND ND	ND ND
bis(2-Ethylhexyl)phthalate	5800	1700	1100	49000	ND
Chrysene	ND ND	ND ND	ND ND	ND ND	ND ND
Di-n-octyl phthalate Benzo(b)fluoranthene	ND	DIND	ND	ND	, ND ;
Benzo(k)fluoranthene	ND ND	ND ND	ND ND	ND ND	ND ND
Benzo(a)pyrene Indeno(1,2,3-c,d)pyrene	ND	ND	, RD	ND	ND I
Dibenzo(a,h)anthracene	ND	ND	ND	ND	ND
Benzo(g,h,i)perylene	ND	ND	ND	ND	ND
TOTAL TARGETED BASE NEUTRALS ***	5837	2060	1100	129900	ND
NON-TARGETED BASE NEUTRALS					
Total Sulfur Total Phthalates	ND ND	ND ND	ND ND	ND 5400	ND ND
Total Benzene compounds	ND	ND	ND	ND	ND
Total Alkane compounds Total Alkene compounds	ND 210	990 2550	460 260	11400	ND ND
Total Anthracene compounds	ND	ND	ND	ND	, ND
Total Naphthalene compounds	ND	ND	ND	ND	ND ND
Total Alcohol compounds Total Hexandecanoic acid	ND ND	ND 860	1500 ND	33000 ND	ND ND
Total Phosphoric acid	ND	ND	ND	67000	ND .
Total Propanoic acid	ND ND	ND 1810	ND 950	11000	ND ND
Total Aidehyde compounds Total Unknown compounds	320	2250	3350	139900	ND
Total Other compounds	ND	ND	ND	47000	ND
TOTAL NON-TARGETED BASE NEUTRALS	530	8060	6520	344200	ND

NOTES:

J - Detected below reporting limit or is an estimated concentration.
p - Compound also detected in laboratory method blank.
B - Compound also detected in laboratory method blank, and sample concentration is at least 5 times greater than laboratory method blank concentration.
ND - Not detected.
** - Analyzed by EPA Method 625 and reported in ug/l.
** - Excludes compounds detected in laboratory method blank (p); includes compounds detected at trace concentrations (J) and (B).



SUMMARY OF PRIORITY POLLUTANT METALS TESTING - HAND AUGER RESULTS

1027WG.FM

TABLE 14: SUMMARY OF PRIORITY POLLUTANT METALS TESTING - HAND AUGER RESULTS L.E. CARPENTER, WHARTON, NEW JERSEY.

GeoEngineering, Inc. November 1989

1 of 2

SAMPLE ID: DATE SAMPLED:	i	HA-2 3/23/89	1	HA-3 3/23/89	1	HA-4 3/22/89	1	HA-5 3/22/89	!	HA-6 3/22/89	1	HA-7 3/22/89	 	HA-8 3/22/89	1	FIELD BLANK 3/22/89	ı	FIELD BLANK 3/23/89	1
SAMPLE DEPTH (feet):		05	ı	05	- 1	05	ı	05	Į	05	- 1	05	1	05	1	-	1	-	i
22222222222222222222222222222222222222	:= :	========	== :	*******	== :	*******	==	========	==	========	==	=======	==	=======	== :	=======	== =	=======	==
PARAMETER	!		- !		1		ı		- 1		I		ı		1		1		ı
(mg/kg)	ı		- 1		ı		1		1		- 1		ı		1		1		i
	ı		-		i		Į		I		ı		ı		1		ı		ì
Antimony	1	413	ı	23.3	ı	125	ı	123	ı	212	- 1	67.9	- 1	103	ı	ND	ì	ND	i
Arsenic	ı	5.8	ı	5.1	1	10.3	1	9.5	1	5.5	ı	3.1	1	5.3	1	ND	i	ND	i
Beryllium	İ	0.56 J	1	0.48 J	1	.42 J	- 1	0.44 J	1	0.48 J	1	1.6	1	0.76 J	i	ND	i	ND	i
Cadmium	ı	16.2	ı	2.7	1.	9.3	ı	1.4	1	10.7	1	2.9	ı	2.8	i	ND	i	ND	i
Chronium	1	78.6	1	20.8	I	493	- 1	13.0	1	35.8	-	14.2	1	18.6	i	ND	i	ND	i
Copper	1	87.9	1	90.4	ı	69.7	1	72.3	1	58.6	ı	28.7	ı	237	i	ND	i	ND	1
Lead	1	693	i	215	1	2230	ı	217	1	276	- 1	108	ı	85.5	i	ND	i	ND	•
Nercury	1	1.6	1	1.5	1	0.4	1	0.5	ı	0.4	1	0.4	1	0.1	i	ND	i	ND	;
Nickel	ı	22.1	ı	13.7	1	11.1	ı	8.9 J	ı	10.7	1	8.6 J	i	11.2	i	ND	i	5.8 J	,
Selenium	I	0.58 J	ı	ND	1	1.8	1	0.27 J	1	.58 J	1	ND	i	ND	i	ND	i	1.8 J	1
Silver	i	HD	İ	nd	ı	ND	1	ND	١	ND	ı	HD	i	ND	i	ND	i	ND ND	•
Thallium	ı	ND	ı	HD	1	.52 J	ı	.57	1	.30 J	1	0.31 J	i	0.37 J	i	ND	i	ND	:
Zinc	I	389	1	367	ı	313	ı	165	I.	198	i	98.6	i	96.1	i	7.2 J	1	3.1 J	1
	1		1		1	•	1		1		İ		i	,,,,,	i	1.2 J		3.1 J	

NOTES: J - Detected below reporting limit or is an estimated concentration.

ND - Not detected.

^{** -} Reported in ug/l.

TABLE 14: SUMMARY OF PRIORITY POLLUTANT METALS TESTING - HAND AUGER RESULTS L.E. CARPENTER, WHARTON, NEW JERSEY.

GeoEngineering, Inc. November 1989

2 of 2

										FIELD .	٠
SAMPLE ID:	ı	HA-16	1	HA-17	ı	HA-18	ı	HA-19	ı	BLANK	1
DATE SAMPLED:	ì	3/28/89	i	3/28/89	ı	3/28/89	1	3/28/89	L	3/28/89	1
SAMPLE DEPTH (feet):	i	05	1	05	1	05	1	05	1	-	ı
	: =	2222222	= =	=======	= =	=======	= =	=======	: =:	:::::::	=1
PARAMETER	ı		1		1		1		1		ı
(mg/kg)	ı		1		1		-1		ı		1
	1		1		1		I		ı		1
Antimony	1	26.9	ı	ND	١	ND	1	828	1	ND	i
Arsenic	1	0.89 J	ı	1.1 J	ł	1.4 J	ŀ	2.8	1	ND	ı
Beryllium	1	0.39 J	ı	0.56 J	1	0.69 J	1	0.34 J	1	ND	1
Cadmium	ı	ND	1	ND	1	2.1	ı	49.6	I	RD	1
Chronium	ı	6.7	1	10.8	1	12.3	ı	9.3	1	ND	1
Copper	ı	8.5	1	10.3	1	11.8	1	18.8	1	9.7 J	ı
Lead	Ì	3.9	1	10.0	ļ	4.1	ı	14.4	1	ND	1
Hercury	1	ND	i	ND	1	ND	-	3.4	ı	ND	İ
Nickel	ı	4.1 J	ı	6.4 J	1	5.9 J	1	8.7 J	1	ND	1
Selenium	ı	ND	1	0.38 J	١	0.23 J	1	0.65 J	1	ND	i
Silver	ı	ND	ı	ND	1	ND	ı	ND	l	ND	1
Thallium	1	ND	1	KD	١	ND	١	ND	ı	nd	1
Zinc	1	23.8	1	36.4	١	47.7	-1	59.5	1	3.4 J	ı
	1		1		1		1		ı		ı

NOTES: J - Detected below reporting limit or is an estimated concentration.

ND - Not detected.

** - Reported in ug/l.

TABLE 15

TOTAL PETROLEUM HYDROCARBON AND HYDROCARBON FINGER PRINT TESTING - HAND AUGER AND GROUNDWATER RESULTS

1027WG.FM 6/25/90

TABLE 15: TOTAL PETROLEUM HYDROCARBON AND HYDROCARBON FINGER PRINT TESTING - HAND AUGER & GROUNDWATER RESULTS
BY EPA METHOD 418.1 & MODIFIED ASTM METHOD 03328
L.E. CARPENTER, WHARTON, NEW JERSEY.
Page 1 of 1

HAND AUGER RESULTS

Sample	•		TPH Results (mg/kg)	Total Hydrocarbons (mg/L)	Identification
HA-1	3/27/89	05	NA	1.20 	"characteristics similar to an unidentified resolved component n-C25 to n-C26 range."
HA-1	5/9/89	05	654	i NA	
HA-23	3/27/89	 05	1.20		
HA-24	3/27/89	 05 	 0.91 	i NA (•
HA-25	3/27/89	05	2.50	NA [·
Field Blank	3/27/89	 • 	ND	i I I NA I I I	-
Field Blank	5/9/89	 - 	ND] NA [NA	• •

GROUNDWATER RESULTS

Ţ	Date	Sample Depth	TPH Results	Total Hydrocarbon	s Qualitative
•	ampled	• •	(mg/L)	(mg/L)	Identification
2000000 EDI		*******		*********	*****************************
MW-11s 9/	/21/89	floating	770,000	I NA	"characteristics similar to a mixture of gasoline and a
1	1	product	l	1	petroleum product in the lubricating range with polar
1	- 1	[1	1	components in the n-C25 to n-C26 range."
MW-11s 1/	/26/90	floating	1,000,000	NA :	"characteristics similar to a mixture of paint thinner
1	- 1	product		· · · · · · · · · · · · · · · · · · ·	and a petroleum product in the n-C21 to n-C28 range with
1	- 1	(l	Ì	a large polar component in the n-C21 to n-C23 range."
MW-121 5/	/18/89	floating	NA	1,100	"characteristics similar to a mixture of paint thinner,
1	I	product	Ī	1	lubricating oil, and Fuel Oil No. 6. Based on the
1	· I	i]	ļ	distribution of n-alkanes and isoprenoid hydrocarbons,
1	1	l	;	1	the Fuel Oil No. 6 appears to be moderately weathered."
MW-12s 9/	/21/89	floating	380	l N A	"characteristics similar to a mixture of gasoline and a
1	1	product	1	l	petroleum product in the fuel oil/lubricating oil range
I	1			l	with 2-ring to 4-ring polynuclear aromatic hydrocarbons"
Field 9/	/21/89	- 1	ND	NA NA	
Blank	- 1	ı		1	1

NOTES: - - Not applicable.

NA - Not analyzed

ND - Not detected

TABLE 16

SUMMARY OF PRIORITY POLLUTANT ORGANOCHLORINE PESTICIDES/ PCBS TESTING - HAND AUGER RESULTS

1027WG.FM

TABLE 16:

ORITY POLLUTANT ORGANOCHLORINE PESTICIDES/PCBs TESTING - HAND AUGER RESULTS	Page 1 of 1	FIELD
TESTING -		
PESTICIDES/PCBs		
ORGANOCHLORINE	ERSEY.	
F PRIORITY POLLUTANT	ENTER, WHARTON, NEW JERSEY	
SUMMARY OF PRIO	L.E. CARPI	

FIELD ** BLANK 3/27/89	222222222222222222222222222222222222222
HA-22 3/27/89 05	222222222222222222222222222222222222222
HA-21 3/27/89 05	222222222222222222222222222222222222222
HA-20 q 3/27/89 0 - 5	999999999999999999999999999999999999999
6 0 II L	alpha-BHC beta-BHC delta-BHC delta-BHC delta-BHC delta-BHC leptachlor Aidrin Heptachlor epoxide Endosulfan I 4.4'-DDE Endosulfan II 4.4'-DDD Endosulfan II A'-DDT Endosulfan II A'-DDT Endosulfan II A'-DDT Endosulfan II A'-DDT A'-DT A'-DDT A'

NOTES:

ND - Not detected. ** - Reported in ug/1. q - Surrogate recovery below NJDEP Tier I limit (because of dilution)

TABLE 17A

VOLATILE ORGANICS TESTING - FIRST ROUND GROUNDWATER RESULTS

1027WG.FM

TABLE 17-A: VOLATILE ORGANICS TESTING - FIRST ROUND GROUNDWATER RESULTS BY EPA METHOD 624

LE CARPENTER, WHARTON, NEW JERSEY.

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	MW-1 9/21/89	 MW-2 9/21/8	 MW-3 * 9 9/22/89	 MW-4 9/21/89	 MW-5 9/21/89	Field Blank 9/21/89	Trip Blank 9/21/89	Trip Blenk 9/22/89
PARAMETER		ļ	1		l I		I	
(ug/1)		I	1	1	l 1	I	- 1	i
Chloromethane	ND	ND	I ND	ND	I ND I	ND	ND į	ND
Bromomethane	ND	ND	I ND	I ND	ן מא ן	ND	ND į	ND
Vinyl chloride	ND	I ND	ND	I ND	ן מא ן	ND	ND	ND
Chloroethane	DN	j n d	j ND	I ND	ן מא ן	ND	ND	ND
Methylene chloride	320 J	I ND	j ND	ND	ן מא ן	ND	ND [25 p
1,1-Dichloroethene	ND	IND	j ND	ND	I ND I	ND	ND	ND
1,1-Dichloroethane	ND	j ND	I ND	ND	l ND l	ND	ND į	ND
1,2-Dichloroethene (total)	ND	I ND	I ND	[ND	I ND I	ND į	ND	ND
Chloroform	ND	I ND) ND	, ND	I DN I	ND j	ND [ND
1,2-Dichloroethane	ND	ND	ND	I ND	ן מא ן	ND	ND [ND
1,1,1-Trichloroethane	ND	I ND	ND	j ND	I ND I	ND	ND į	ND
Carbon tetrachloride	ND	50 J	ND	ND	j ND j	ND [ND į	ND
Bromodichloromethane	ND	I ND	ND ND	I ND	I ND I	ND	ND į	ND
1,2-Dichloropropane	ND	I ND	j ND	I ND	, ND ,	ND	ND [ND
trans-1,3-Dichloropropene	ND	ND	I ND	1 ND	ND [ND [ND Į	ND
Trichloroethene	ND	ND	I ND	I ND	I ND [ND [ND	ND
Dibromochloromethane	ND	I ND	Į ND	ND	I ND I	ND į	ND	ND
1,1,2-Trichloroethane	ND	ND	i ND	I ND	ND	ND [ND [ND
Benzene	ND	ND ND	1 ND	ND ND	ND	ND	ND ;	ND
cis-1,3-Dichloropropene	ND	I ND	ND	I ND	I ND I	ND j	ND j	ND
2-Chloroethyl vinyl ether	ND	I ND	I ND	I ND	ND I	ND I	ND 1	ND
Bromoform	ND	I ND	l ND	I ND	ND	ND I	ND 1	ND
1,1,2,2-Tetrachloroethane	ND	I ND	j ND	I ND	, ND (ND I	ND I	ND
Tetrachloroethene	ND	, ND	I ND	I ND	i ND i	ND I	ND I	ND
	67 J	, ND	I ND	ND	I ND I	ND I	ND I	ND
	ND	ND	I ND	i ND	I ND I	ND I	ND I	ND
Ethylbenzene	6800	64 J	1 10000	1.7 J	I ND I	ND I	ND I	ND
Xylenes (Total)	32000	1 1600	67000	I 17	i ND i	ND I	ND I	ND
12-Butanone	ND ND	I ND	I ND	I ND	I ND I	ND I	ND I	ND
Heptane	ND	I ND	I ND	i ND	I ND I	ND I	ND I	ND
1	, .	1	<u>.</u>	<u>.</u>	, , 	· · · · · · · · · · · · · · · · · · ·	I	
	39187	1 1714	1 77000 e	1 18.7	I ND I	ND I	ND I	ND
I and the second	, <i></i> ,	1	1	1	, . ,	1	1	
 TOTAL NON-TARGETED VOLATILE ORGANICS	ND	I ND	i ND e	I ND	I ND I	ND I	ND i	ND

NOTES: 3 - Detected below reporting limit or is an estimated value.

p - Compound also detected in laboratory method blank.

e - Sample holding time was exceeded.

ND - Not detected.

^{*** -} Excludes compounds also detected in laboratory method blank (p); includes compounds detected at trace concentrations (J).

^{* -} No field blank collected; sample collected with dedicated gas displacement sampler.

TABLE 17-A: VOLATILE ORGANICS TESTING - FIRST ROUND GROUNDWATER RESULTS

BY EPA METHOD 624

LE CARPENTER, WHARTON, NEW JERSEY.

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SAMPLE ID: DATE SAMPLED:	MW-8 9/20/89		MW-111 9/20/89			9/20/89		9/20/89	
PARAMETER]] [l	i	1	
(ug/1)]		l 1		I	1	1	
Chloromethane	ND i	ND I	ND	ND	ND	I DN	ND	ND [ND
Bromomethane	ND {	ND	ND (ND	ND	ND	ND	ND	ND
Vinyl chloride	ND	ND	ND	ND	ND	ND]	ND [ND	ND
Chloroethane	ND	ND	ND	ND [ND	ND	ND [ND	ND
Methylene chloride	27	8.7 Jp	42 J	8.3 J	140 J	ND [ND	11 Jp	ND
1,1-Dichloroethene	ND I	ND	ND	ND	ND	ND	ND [ND j	ND
1,1-Dichloroethane	ND	ND	ND I	ND	ND	ND	ND	ND 1	ND
1,2-Dichloroethene (total)	ON	DND	ND	ND	ND	ND	ND	ND	ND
Chloroform	D D	DND	I ND I	ND	ND	ND	ND	ND [ND
1,2-Dichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	ND	I :ND	I ND	מא ו	ND.	ND I	ND	ND	ND
Carbon tetrachloride	I ND	ND	J ND	ND	ND	ן מא	ND	ND	ND
Bromodichloromethane	l ND	I ND	I ND	ND I	ND	ND I	ND	ND I	ND
1,2-Dichloropropane	I ND	I ND	I ND	ND I	ND I	ND I	ND I	ND	ND
trans-1,3-Dichloropropene	I ND	. ND	I ND	ND i	ND !	ND I	ND I	ND I	ND
Trichloroethene	I ND	I ND	I ND	ND I	ND	ND I	ND I	ND 1	ND
Dibromochloromethane	I ND	I ND	I ND	ND I	ND I	ו מא	ND I	ND	ND
1,1,2-Trichloroethane	I ND	I ND	I ND	I ND	ND I	I ND I	ND I	ND (ND
Benzene	I ND	I ND	I ND	I ND	ND I	ו למא ו	ND I	ND I	ND
cis-1,3-Dichloropropene	I ND	I ND	I ND	ND I	ND I	ND I	ND I	ND I	ND
[2-Chloroethyl vinyl ether	I ND	I ND	I ND	I ND	ND I	ND I	ND i	ND J	ND
Bromoform	I ND	I ND) ND	I ND	I ND	ND I	ND 1	ND I	ND
1,1,2,2-Tetrachloroethane	I ND	i ND	I ND	ND	ND I	I ND I	ND I	ND I	ND
Tetrachloroethene	1 ND	I ND	I ND	I ND	I ND	ND I	ND I	ND I	ND
Toluene	1 ND	i ND	I ND	l ND	23 J		ND I	ND I	ND
Chlorobenzene	I ND	I ND	i ND	L ND	I ND	ND I	I ND I	ו מא	ND
Ethylbenzene	I ND	I ND	1 88	I ND	l 640	1 4 J	ND 1	. ND I	ND
[Xylenes (Total)	i 13	, ND	1 700	I ND	3100		ND I	, ND I	ND
12-Butanone	I ND	I ND	I ND	ם או מאו	I ND	I ND	ND I	ND I	ND
Heptane	I ND	i ND	I ND	I ND	i ND	ND I	I ND 1	I ND I	ND
1	1	, I	•	1	, I			i	
	40	, I ND	, 830 e	! 8.3:	, 3903	22 e	ND	, ND I	ND
1	1	1	ŀ	1	į .	!		l 1	
1	l	ı	ı	I	l	1		1	1
INON-TARGETED VOLATILE ORGANICS	ı	ı	ı	I	1	i 1		l	İ
Carbon disulfide	2.8	j ND	ND	23	J ND	3.5	ND 1	ND (ND
Total C9H12 isomer	, ND	ND	I ND	ND	I ND	12.8	ND	ND I	ND ND
								1	1

NOTES: J - Detected below reporting limit or is an estimated concentration.

p - Compound also detected in laboratory method blank.

e - Sample holding time was exceeded.

ND - Not detected.

^{*** -} Excludes compounds also detected in laboratory method blank (p); includes compounds detected at trace concentrations (J).

TABLE 17-A: VOLATILE ORGANICS TESTING - FIRST ROUND GROUNDWATER RESULTS
BY EPA METHOD 624

LE CARPENTER, WHARTON, NEW JERSEY.

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I	l	<u> </u>	l i	ا ا	I	Field] Field	Trip	Trip
•		•	•	MW-141 {		Blank	Blenk	Blank	Blank
DATE SAMPLED:	9/15/89	9/15/89	10/24/89	10/24/89	10/24/89	9/15/89	10/24/89	9/15/89	10/24/89
PARAMETER		 	1	i I	1		ì	 	
(ug/1)			1	İ	i		i	I	i
Chloromethane	ND	ND	I ND	ND I	ND (ND	l ND	J ND	I ND
Bromomethane	ND	ND	I ND	ND	ND [ND	I ND	ND	I ND
Vinyl chloride	ND	ND	ND	ND j	ND	ND	1 ND	l ND	l ND
Chloroethane [ND	ND	I ND	ND j	ND	ND	ND	ND	ND
Methylene chloride	19Jp	21 Jp	ND	ND	ND	17 J p	7.63	13Jp	I ND
1,1-Dichloroethene	ND	3.6 J	j ND j	ND (ND	ND	ND	l ND	ND
1,1-Dichloroethane	ND	21	I ND	ND	ND j	ND	ND	I ND	I ND
1,2-Dichloroethene (total)	ND	11	I ND	ND	ND [ND	ND	Į ND	, ND
Chloroform	ND	ND	J ND	ND	ND	ND	I ND	ND	ND
1,2-Dichloroethane	ND	ND	I ND	ND	ND	ND	, ND	I ND	, ND
1,1,1-Trichloroethane	ND	2.6 J	ן מא ן	ND	ND	ND	I NO	J ND	J ND
Carbon tetrachloride	ND	ND	I ND	ND	ND	ND	ND	J ND	I ND
Bromodichloromethane	ND	ND	I ND	ND j	ND	ND	ND	, ND	I ND
1,2-Dichloropropane	ND	ND	J ND	ND	ND	ND	ND	ND	ND ND
trans-1,3-Dichloropropene	ND	ND	ND I	ND j	ND	ND	ND	I ND] ND
Trichloroethene	ND	5.2	j ND ;	ND j	ND	ND	ND	ND I	I ND
Dibromochloromethane	ND	ND	I ND	I ON	ND	ND	ND	ND I	I ND
1,1,2-Trichloroethane	ND	ND	I NO I	ND	ND	ND	I ND	ND	l ND
Benzene	ND	ND	ND	ND	ND	ND	ND	ND	I ND
cis-1,3-Dichloropropene	ND	ND	I ND	ND	ND [ND	I ND	ND	J ND
2-Chloroethyl vinyl ether	ND	ND	ND	ND	ND	ND	ND I	ND	J ND
Bromoform	ND	ND	I ND	ND J	ND I	ND	I ND	I ND	I ND
1,1,2,2-Tetrachloroethane	ND	ND	ND	ŅD Į	ND I	ND	סאן	ND	I ND
Tetrachloroethene	ND	3.5 J	I ND	ND I	ND 1	ND	I ND	I ND	I ND
Toluene	ND	1.1 J	j ND j	ND	ND I	ND	I ND	I ND	I ND
Chlorobenzene	ND	ND	I ND I	ND I	ND j	ND	, ND	ND	ND
Ethylbenzene	ND	ND	ND	ן מא	ND I	ND	I ND I	ND	I ND
Xylenes (Total)	ND	ND	ND	ND 1	ND I	ND	I ND	ND	I ND
2-Butanone	ND	ND	J ND 1	ND I	ND I	ND	i ND i	I ND	i NID
Heptane [ND	ND	ND	ND I	ND I	ND	I ND	NO	I ND
i			İ	i	i		1	, <u>.</u>	, I
TOTAL TARGETED VOC ***	ND	48 e	I ND I	ND I	ND I	ND e	1 7.6	ND e	I ND I
ì	Ì			i	· ,		, , 	, }	<u>. </u>
NON-TARGETED VOC	i	·]	i	1		· 1	, 	•
1,1,2-Trichloro-	ND I	ND	I ND I	ND I	ND I	ND	I ND 1	ND	i ND i
1,1,2-trifluorethane	i	· 			1		<u>.</u> ;	, <u>. </u>	, [
TOTAL NON-TARGETED VOC	ND I	ND e	INĖDI	ND i	ND I	ND e	i ND i	i NDe	i ND :

NOTES: J - Detected below reporting limit or is an estimated concentration.

p - Compound also detected in laboratory method blank.

e - NJDEP Tier sample holding time was exceeded.

ND - Not detected.

^{*** -} Excludes compounds also detected in laboratory method blank (p); includes compounds detected at trace concentrations (J).

TABLE 17-A: VOLATILE ORGANICS TESTING - GROUNDWATER RESULTS
BY EPA METHOD 624
LE CARPENTER, WHARTON, NEW JERSEY.

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	*********	******	#2022222202020
I	I	Field	Trip
MW-151	MW-15s	Blank	Blank
9/14/89	9/14/89	9/14/89	9/14/89
	 		
ì	i	I	i
l ND	I ND	I ND	I ND
) ND	l ND	Į ND	I ND
j ND	ND ND	I ND	I ND
l ND	l ND	I ND	I ND
] 2.8 Jp	7.5 Jp	7.8 Jp	I 5.8 Jp
I ND	i ND	I ND	I ND
I ND	l ND	ND ND	I ND
, ND	ND	I ND	l ND
I ND	I ND	I ND	I ND
I ND	I ND	I ND	I ND
1 ND	I ND	l ND	I ND
1 ND	ND	I ND	I ND
l ND	l ND	I ND	l ND
I ND	I ND	I ND	. ND
I ND	I ND	I ND	I ND
I ND	I ND	I ND	I ND
I ND	I ND	I ND	ND I
ND	מאן	ND ND	ND ND
J ND	GN)	ND	ND I
I ND	םא ן	ND ND	ND I
, ND	ND	ND I	ND
I ND	I ND i	ND	ND
ND	I ND	I ND I	ND 1
I ND	ND	ND	ND I
1.6 J	1.9 J	2.2 J	1.6 J
I ND	ND I	ND I	ND I
I ND	Į ND į	ND I	ND I
I ND	ND	ND I	ND I
ND	ND	ND	ND I
I ND	I ND I	ND I	ND I
1	1	<u>'</u>	
1.6	1.9	2.2	1.6
25 p	12 p		24 p
	· ·- ·- · ·	P (P
ND	I ND I	ND (ND I
	9/14/89 ND	9/14/89 9/14/89	MM-151

NOTES: J - Detected below reporting limit or is an estimated concentration.

p - Compound also detected in laboratory method blank.

ND - Not detected.

^{*** -} Excludes compounds also detected in laboratory method blank (p); includes compounds detected at trace concentrations (J).

LE CARPENTER, WHARTON, NEW JERSEY.

SAMPLE ID:	MW-161	MW-16s	MW-17d	MV-17s	Field Blank			
DATE SAMPLED:	9/20/8	•	9/14/89	9/14/89	9/14/89	9/20/89	9/14/89	9/20/8
PARAMETER			 				 	
(ug/1)	l	ı	1				i	I
Chloromethane	ND	ND	I ND	ND	ND	ND	I ND	I ND
Bromomethane	ND	{ ND	I ND	ND	ND	ND	I ND	i ND
Vinyl chloride	ON I	j ND	ND I	ND	ND I	ND:	I ND	I ND
Chloroethane	ND	ND ND	[ND	ND	ND	ND	J ND	I ND
Methylene chloride	11 Jp	17 J	2.5 Jp	8.1 Jp	7.8 Jp	. ND	5.8 Jp	•
1,1-Dichloroethene	ND	I ND	I ND	ND	ND i	ND	I ND	I ND
1,1-Dichloroethane	ND	I ND	I ND I	ND I	ND	ND	I ND	I ND
1,2-Dichloroethene (total)	ND	I ND	I ND I	ND I	ND I	מא	I ND	I ND
Chloroform	ND	I ND	ו כוא ו	ND I	I ND I	ND	I ND	ON I
1.2-Dichloroethane	ND	I ND	1 1.7 J		ו כטייו ו מא ו	ND	i ND	•
1,1,1-Trichloroethane	l ND	I ND	I ND I	ן כאו ו ו כאו ו	I ND I	ND	•	I ND
Carbon tetrachloride	I ND	I ND	I NO I	I ND I		· · -	I ND	ND
Bromodichloromethane	I ND	I ND			ND	ND	ם או	ND
1,2-Dichloropropane	I ND	•	j ND j	ND	ND I	ND	ND :	ND
trans-1,3-Dichloropropene		ND	I ND I	ND I	ND I	ND	ND	ND
Trichloroethene	ND ND	I ND	ן מא ן	ND	ND I	ND	I ND	ND
Dibromochloromethane	ND NO	I ND	ND	ND [ND [ND	I ND	ND
	ND	I ND	I ND I	ND [ND [ND	I ND	ND
1,1,2-Trichloroethane	ND	I ND	I ND I	ND		ND	I ND	ND
Benzene	ND	I ND	i ND I	ND J	ND I	ND	I ND	ND
cis-1,3-Dichloropropene	ND	I ND	I ND I	ND	ND	ND	I ND	ND
2-Chloroethyl vinyl ether	ND	ND		ND	ND	ND	I ND I	ND
Bromoform	ND	j ND	I ND !	ND	ND [ND	I ND (ND
1,1,2,2-Tetrachloroethane	ND	ND	I ND I	ND [ND	ND	I ND	ND
Tetrachloroethene [ND	I ND	ND	ND	ND	ND	j ND j	ND
Toluene	ND	[ND	1.3 J	2.5 J	2.2 J	ND	1.6 J	ND
Chlorobenzene	ND	ND	I ND I	ND 1	ND I	ND	ו מא ו	ND
Ethylbenzene	ND	ND	I ND I	ND	ND j	4 J	ND	ND
Xylenes (Total)	ND	J ND	ND I	ND I	ND !	18	INDI	ND
2-Butanone	ND	. ND	I ND I	ND I	ND I	ND	ND	ND
Heptane j	ND	i ND	I ND i	ND i	ND 1	ND	I ND I	ND
i		i	1 1	· · · · · · · · · · · · · · · · · · ·	1	.,,	, <u>. </u>	
TOTAL TARGETED VOLATILE ORGANICS ***!	ND	17	' ' 3	2.5	2.2	22 e	 1.6	ND
			1 1	2.7	2.2 1	22 6	. 1.0	NU
NON-TARGETED VOLATILE ORGANICS	 		1 1				! ! ! !	
Carbon disulfide	3.1	i No	1 J	ND 1	NO 1		[
Total C9H12 isomer		ND	I ND I	ND 1	ND I	3.5	ND I	ND
1.1.2-Trifluorethane	ND	I ND	I ND I	ND [ND	12.8	ND	ND
1,1,6-1111100167116116	ND	I ND	18 p 	20 p	13 p į	ND	13 p 	ND
TOTAL NON-TARGETED VOLATILE ORGANICS	3.1	ND	, i I ND I	ND	ND J	16.3 e	i i ND	ND
			•	•	•	- 1	'	

NOTES: J - Detected below reporting limit or is an estimated concentration.

p - Compound also detected in laboratory method blank.

e - Sample holding time was exceeded.

ND - Not detected.

^{*** -} Excludes compounds also detected in laboratory method blank (p); includes compounds detected at trace concentrations (J).

TABLE 17-A: VOLATILE ORGANICS TESTING - FIRST ROUND GROUNDWATER RESULTS

BY EPA METHOD 624

LE CARPENTER, WHARTON, NEW JERSEY.

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	•	•	•	 Pro-Well 10/24/89		Field Blank 10/24/89		Trip Blank 10/24/89
PARAMETER	1	ı	I	l	1	ı	 	1
(ug/l)	1	l	I		I	1	ı	ı
Chloromethane	j ND	CN	j ND	l ND	j ND	Į ND	I ND	I ND
Bromomethane	į ND	I ND	ND	ND ND	ND	I ND	ם או	j ND
Vinyl chloride) ND	J ND	ND	ND	J ND	l ND	I ND	I ND
Chloroethane	ND	J ND	[ND	ND	I ND	1 ND	I ND	. ND
Methylene chloride	12 Jp	9 Jp	[11 Jp	ND ND	17 Jp	7.6 J	13 Jp	I ND
1,1-Dichloroethene	I ND	I ND	I ND	, ND	I ND	I ND	l ND	I ND
1,1-Dichloroethane] ND	I ND	, ND		I ND	I ND	. ND	l ND
1,2-Dichloroethene (total)	I ND	I ND	I ND	I ND	I ND	I ND	I ND	I ND
Chloroform	[ND	I ND	I ND	ND	I ND	ND	I ND	I ND
1,2-Dichloroethane	I ND	I ND	I ND	ND	I ND	1 ND	I ND	l ND
1,1,1-Trichloroethane	i ND	I ND	I ND	ND	I ND	I ND		I ND
Carbon tetrachloride	I ND	I ND	I ND	ND	I ND	I ND	I ND	I ND
Bromodichloromethane	I ND	I ND	I ND	,	I ND	I ND	I ND	I ND
1,2-Dichloropropane	I ND	I ND	IND	ND	I ND	I ND	I NO	I ND
trans-1,3-Dichloropropene	I ND	I ND	I ND	ND	I ND	I ND	ם או	I ND
Trichloroethene		1 ND	I ND	ND	I ND	I ND	l ND	I ND
Dibromochloromethane	I ND	I ND	ו אם	ND:	I ND	I ND	I ND	ם או מאו
1.1.2-Trichloroethane	I ND	I ND	ם או	ND	i ND	I ND	I ND	I ND
Benzene	I ND	I ND	I ND	ND ND	I ND	I ND		i ND
cis-1,3-Dichloropropene	I ND	I ND	I ND	ND ND	i ND		I ND	ם או מאין
2-Chloroethyl vinyl ether	I ND	I ND	I ND I	ND	ו אם	i ND	ם או	
Bromoform	l ND	I ND	I ND I					I ND
1.1.2.2-Tetrachlorgethene	I ND	I ND	I ND I	ND ND	I ND		ND	j ND
Tetrachloroethene	I ND	I ND	•		•	I ND		I ND
Toluene	I ND		1 ND	ND	ND	I ND		I ND
Chlorobenzene		I NO	I ND		•	ND		Į ND
Ethylbenzene	I ND	I ND	I ND I			I ND		} ND
• • • • • • • • • • • • • • • • • • • •	I ND	ND	I ND [ND	I ND	ND ND	i ND
Xylenes (Total)	I ND	I ND	I ND		•	ן אם ן	ND	I ND
2-Butanone	I ND	ND	I ND		j ND	i ND	ND	l MD
Heptane	I ND	I ND	ND	ND	I ND	I ND	ND	l ND
	l	t	1 1		I	!		I
TOTAL TARGETED VOLATILE ORGANICS ***	ND	םא ן	ND	ND	ND	7.6	ND	ND ND
	1	i	1 1		l	i !		l
	i	1	1 1		l	1		I
NON-TARGETED VOLATILE ORGANICS	1	1	1 1		1	1 1		l
1,1,2-Trichloro-1,2,2-trifluoroethane	6.9	8.1	6.5	ND	I ND	ND	ND	I ND
	l .	I	1 1		I	1 1		l
TOTAL NON-TARGETED VOLATILE ORGANICS	6.9	8.1	6.5	ND	ND	I ND	NB	I ND

NOTES: J - Detected below reporting limit or is an estimated concentration.

p - Compound also detected in laboratory method blank.

ND - Not detected.

^{*** -} Excludes compounds also detected in the laboratory method blank (p); includes compounds detected at trace concentrations (J).

TABLE 17B

VOLATILE ORGANICS TESTING - SECOND ROUND GROUNDWATER RESULTS

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Table 17-B: VOLATILE ORGANICS TESTING- SECOND ROUND GROUNDWATER RESULTS BY EPA METHOD 624

L.E.CARPENTER, WHARTON NEW JERSEY

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SAMPLE ID: DATE SAMPLED:	 MW-1 1/25/90			 MW-4 1/24/90	 MW-5 1/24/90		 MW-7 1/25/90	 MW-8 1/25/90	Field Blanks 1/24/90	Field Blanks 1/25/90		Trip Blanks 1/25/90
PARAMETER (ug/1) Chlorobenzene Chloromethane 1,1-Dichloroethane 1,2-Dichloroethene 1,2-Dichloroethene 1,2-Dichloroethene(total) Ethylbenzene Heptane Methylene Chloride Tetrachloroethene Toluene 1,1,1-Trichloroethane Trichloroethene Xylenes (total) Chloroform TOTAL TARGETED VOLATILE ORGANICS Heptanol Unknowns 1,1,2Trichloro-1,1,2Trifluoroethane	ND ND ND ND ND ND ND ND ND ND ND ND ND	ND ND ND ND ND ND ND ND	 ND ND ND ND ND 6900 1800 J ND ND ND ND ND ND	ND ND ND ND ND ND ND ND ND ND ND ND ND N	ND	ND ND ND ND ND ND ND ND	ND ND ND ND ND ND ND ND ND ND ND ND ND	ND ND ND ND ND ND ND ND	ND	ND ND ND ND ND ND ND ND		6.9 B ND ND ND ND ND ND ND AD ND AD ND ND ND ND ND ND ND ND ND ND ND ND ND
TOTAL NON-TARGETED VOLATILE ORGANICS	 	i i i nd	ND	7.7		9300	I I I ND	i i i i i nd	i i i ND	I ND	i i i nd	I ND

ND - Not detected.

J - Detected below reporting limit or is an estimated value.
B - Also detected in laboratory method blank.

Table 17-B: VOLATILE ORGANICS TESTING- SECOND ROUND GROUNDWATER RESULTS BY EPA METHOD 624

L.E.CARPENTER, WHARTON NEW JERSEY

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					 MW-12s 1/26/90	 MW-121 1/26/90	Field Blanks 1/24/90	Field Blanks 1/25/90	Field Blanks 1/26/90	Trip Blanks 1/24/90	Blanks	Trip Blanks 1/26/90	 MW-13s 1/23/90
PARAMETER (ug/1) Chlorobenzene Chloromethane 1,1-Dichloroethane 1,2-Dichloroethene 1,2-Dichloroethene(total) Ethylbenzene Heptane Methylene Chloride Tetrachloroethene Toluene 1,1,1-Trichloroethane Trichloroethene Xylenes (total) Chloroform TOTAL TARGETED VOLATILE ORGANICS Heptanol Unknowns 1,1,2Trichloro-1,1,2Trifluoroethane		 ND ND ND ND 26000 ND 8800 B ND ND ND ND ND ND	 ND ND ND ND ND ND ND N	NO NO NO NO NO NO NO NO NO NO NO NO NO	ND ND ND ND ND ND ND ND	ND ND ND ND ND ND ND ND	ND 1.5 J ND ND ND ND ND ND ND	ND ND ND ND ND ND ND ND ND ND ND ND ND	ND N	ND D ND ND ND ND ND ND ND ND ND ND ND ND ND ND ND ND ND ND ND ND ND ND	ND ND ND ND ND ND ND ND ND ND ND ND ND	ND ND ND ND ND ND ND ND	ND ND 23 4.6 J 11 ND ND ND ND ND 3.5 J A.4 J ND ND ND ND ND ND ND
TOTAL NON-TARGETED VOLATILE ORGANICS	ND	ND	ND	 12	l ND	ND	ND	ND ND	4	i i i nd	i I ND	ND	I NO I

ND - Not detected.

J - Detected below reporting limit or is an estimated value. B - Also detected in laboratory method blank.

Table 17-B: VOLATILE ORGANICS TESTING- SECOND ROUND GROUNDWATER RESULTS BY EPA METHOD 624

L.E.CARPENTER WHARTON, NEW JERSEY Page 3 of 4

DATE SAMPLED:	 MW-13s 1/23/90		 MW-14s 1/23/90	 MW-141 1/23/90	 MW-14d 1/23/90	 MW-15s 1/23/90	 MW-151 1/23/90	 MW-16s 1/22/90	 MW-16i [*] 1/22/90	Field Blanks 1/22/90		Trip Blanks 1/22/90	Trip Blanks 1/23/90
PARAMETER (ug/l) Chlorobenzene Chloromethane 1,1-Dichloroethane 1,2-Dichloroethene 1,2-Dichloroethene(total) Ethylbenzene Heptane Methylene Chloride Tetrachloroethene Toluene 1,1,1-Trichloroethane Trichloroethene Xylenes (total) Chloroform TOTAL TARGETED VOLATILE ORGANICS	ND ND 23 4.6 J 11 ND ND ND ND ND ND ND ND ND ND ND ND ND	ND	ND	ND ND ND ND ND ND ND ND	ND ND ND ND ND ND ND ND			ND			ND	ND ND ND ND ND ND ND ND ND ND ND ND ND	ND ND ND ND ND ND ND ND
Heptanol Unknowns 1,1,2Trichloro-1,1,2Trifluoroethane	ND ND ND 	ND ND ND ND ND	i ND I ND I ND	ND ND ND ND	ND ND ND ND	ND ND ND	ND ND ND	ND ND ND 	ND ND ND	ND ND ND ND	i ND I ND I ND I	j ND j ND j ND l	ND ND ND
TOTAL NON-TARGETED VOLATILE ORGANICS	ND ND	ND ND	, ND	I ND	i ND	j ND	j ND	į ND	ND NO	j ND	j ND	j ND	i nd i

ND - Not detected.

J - Detected below reporting limit or is an estimated value. B - Also detected in laboratory method blank.

Table 17-B: VOLATILE ORGANICS TESTING- SECOND ROUND GROUNDWATER RESULTS BY EPA METHOD 624

L.E.CARPENTER WHARTON, NEW JERSEY Page 4 of 4

	 MW-17s	 MW-17d	 MW-18s	 MW-18i	 MW-18d			Blanks	Field Blanks	Trip Blanks	Trip Blanks	Trip Blanks
	1/23/90	1/23/90	11/22/90	11/22/90	1/22/90	1/25/90	[1/22/90	1/23/90	1/25/90	1/22/90	1/23/90	1/25/90
PARAMETER	========= 	:======= 	:=====: 			:========]	<u> </u>	 	I I
(ug/1)	i	i	i	i	i	i	i	i	i	İ	İ	i i
Chlorobenzene	i ND	ND	į ND	į ND	į ND	į ND	i ND	j ND	j ND	j ND	j ND	ND
Chloromethane	i ND	i ND	j ND	i ND	į ND	į ND	I ND	I ND	I ND	I ND	I ND	ן מא ן
1.1-Dichloroethane	i ND	į ND	j ND	ND	į ND	j ND	į ND	j ND	ND	ДИ	j ND	j ND j
1.1-Dichloroethene	į ND	ND ND	j ND	ND ND	ND ND	ND	I ND	l ND	ND	j ND	l MD	ND I
1,2-Dichloroethene(total)	j ND	į ND	j ND	ND ND	į ND) ND	j ND	j ND	į ND	j ND	į ND	į ND į
Ethylbenzene	j ND	j ND	į ND	j ND	j ND	j ND	ND	ND	j ND	ND ND	į ND	ND I
Heptane	į ND	j ND	j ND	j ND	į ND	j ND	j ND	ND ND	ND ND	ND ND	I ND	ND
Methylene Chloride	j ND	[ND	į ND	j ND	į ND	j ND	j 3.8 J	j 5 J	3.9 J	2.2 J	5.4 B	6.9 B
Tetrachloroethene	I ND	į ND	l ND	I ND	j ND	j ND	ND	ND ND	I ND	I ND	ND ND	I ND I
Toluene	į ND	į ND	į ND	I ND	j ND	j ND	ND	j ND	j ND	į ND	I ND	į ND į
1,1,1-Trichloroethane	I ND	ND ND	ND	I. ND	j ND	j ND	ND	I ND	[ND	I ND	I ND	I ND I
Trichloroethene	j ND	ND ND	ND ND	ND) ND	ND	j: ND	ND	ND	j. ND	ND ND	i ND i
Xylenes (total)) ND	į ND	į ND	j ND	j ND	j ND	ND	I ND	į ND	j ND	į ND	i ND i
Chloroform	ND ND	į ND	ND ND	i ND	i ND	į ND	ND ND	24	8.2	i ND	į ND	34
TOTAL TARGETED VOLATILE ORGANICS	ND	ND	ND	ND	ND	ND	3.8	29	12.1	2.2	5.4	40.9
Heptanol	I ND	I ND	I ND	ND ND	ND ND	ND	ND ND	ND ND	ND ND	l ND	ND	ND
Unknowns	i ND	ND.	ND	i ND	i ND	i ND	i ND	i ND	i ND	i ND	j ND	j ND j
1,1,2Trichloro-1,1,2Trifluoroethane	ND	ND	ND	ND	ND	ND	ND	i ND	ND	ND ND	į ND	i ND i
				-		ł	!	<u> </u>	!	!	!	1
TOTAL NON-TARGETED VOLATILE ORGANICS	I ND	I ND	ND	I ND	ND	ND	l ND	l ND	ND	ND	I ND	I ND I

ND - Not detected.

J - Detected below reporting limit or is an estimated value.

B - Also detected in laboratory method blank.

TABLE 18A

BASE/NEUTRAL/ACID SEMIVOLATILE ORGANICS TESTING - FIRST ROUND GROUNDWATER RESULTS

TABLE 18-A: BASE/NEUTRAL/ACID SEMIVOLATILE ORGANICS TESTING - FIRST ROUND GROUNDWATER RESULTS
BY EPA METHOD 625
L.E. CARPENTER, WHARTON, NEW JERSEY
Page

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					_	1 01 10
 SAMPLE ID: DATE SAMPLED:	 MW-1 # 9/21/89	 MW-2 9/21/89	 MW-3 * 9/22/89	 MW-4 9/21/89	 MW-5	Field Blank 9/21/89
I PARAMETER	1	1	 I		1	 I
(ug/L)	i	i	i	i	•	i
TARGETED COMPOUNDS	i	i	i	i		i
n-Butylbenzene	i ND	i ND	NĎ	ND	ND	i ND
1-Ethyl-3-methylbenzene	ND	i ND	400 J	ND	ND	ND
1,2,3,5-Tetramethylbenzene	i ND	i ND	ND	ND	ND	ND
1,2,3,4-Tetramethylbenzene	i ND	i ND	i ND	ND	ND	ND
1,2,4-Trimethylbenzene	67	i ND	670	ND	ND	ND
1,2,3-Trimethylbenzene	i ND	i ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	130	i ND	ND	ND	ND	ND
n-Decane	ND	i ND	4200	ND	ND	ND
Styrene	ND	ND.	ND	ND	ND	ND
1,2-Diethylbenzene	ND	ND	ND	ND	ND	ND
Isopropyl benzene	17 J	į ND	ND D	ND	ND	ND
n-Nonane	i ND	i ND	1100	ND	ND	ND ND
Phenol	i ND	ND	ND	ND	ND	ND
bis(2-Chloroethyl)ether	i ND	i ND	I ND	ND	ND	ND
2-Chlorophenol	i ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	i ND	I ND	ND	ND	ND	ND
1,4-Dichlorobenzene	i ND	I ND	ND	ND	ND	ND
1,2-Dichlorobenzene	i ND	ND	ND	ND	ND	ND
bis(2-Chloroisopropyl)ether	i ND	ND	ND	ND	ND	ND
N-Nitroso-di-n-propylamine	i ND	ND	ND	ND	ND	ND
Hexachloroethane	i ND	i ND	ND	ND	ND	ND
Nitrobenzene	i ND	ND	ND	ND	ND	ND
Isophorone	i ND	i ND	ND	ND	ND	ND
2-Nitrophenol	i ND	i ND	ND	ND	ND	ND
2,4-Dimethylphenol	230	ND	ND	ND	ND	ND
bis(2-Chloroethoxy)methane	i ND	i ND	ND ND	ND	ND	ND
2,4-Dichlorophenol	j ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	j ND	ND ND	ND	ND	ND	ND
Naphthalene	ND	ND	ND	ND	ND	ND
Hexachlorobutadiene	ND	ND	ND	ND	ND	ND
4-Chloro-3-methylphenol	j ND	ND.	ND	ND	ND	ND
Hexachlorocyclopentadiene	ND	ND	ND	ND	ND	ND
2,4,6-Trichlorophenol	ND	ND	ND	ND	ND	ND
2-Chloronaphthalene	ND	i ND	ND	ND	ND	ND
Dimethyl phthalate	ND	ND	ND	ND	ND	ND
Acenaphthylene	ND	ND	ND	ND	ND	ND
Acenaphthene	i ND	ND	ND	ND	ND	ND
2.4-Dinitrophenol	ND ND	I ND	ND	ND	ND	ND
4-Nitrophenol	i ND	i ND	ND	ND	ND	ND
2.4-Dinitrotoluene	ND ND	I ND	ND ND	ND	ND	ND
2.6-Dinitrotoluene	ND	i ND	ND	ND	ND	ND
Diethyl phthalate	ND ND	i ND	ND .	ND	ND	ND
4-Chlorophenyl phenyl ether	ND	I ND	ND	ND	ND	ND
Fluorene	ND	ND	ND	ND	ND	ND
		, 200226226	•		,	

TABLE 18-A: BASE/NEUTRAL/ACID SEMIVOLATILE ORGANICS TESTING - FIRST ROUND GROUNDWATER RESULTS BY EPA METHOD 625

LE CARPENTER, WHARTON, NEW JERSEY

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SAMPLE ID: DATE SAMPLED:	 MW-1 # 9/21/89		 MW-3 * 9/22/89	 MW-4 9/21/89	 MW-5 9/21/89	Field Blank 9/21/89
PARAMETER	 				 	
(ug/L)	i	i	i	i	i	i
TARGETED COMPOUNDS (con't)	i	İ	i	i	i	i
4.6-Dinitro-2-methylphenol	j ND	i ND	i ND	i ND	i ND	i ND i
N-Nitrosodiphenylamine	j nd	i ND	ND	i ND	ND	i ND i
4-Bromophenyl phenyl ether	i ND	ND ND	ND .	i ND	ND	ND i
Hexachlorobenzene	j ND	ND ND	ND :	i ND	ND	ND
Pentachlorophenol	j ND	ND ND	j ND	ND	j N D	i ND i
Phenanthrene	j ND	i ND	ND	i ND	ND I	ND I
Anthracene	ND	i ND	ND	ND	ND	ND i
Di-n-butyl-phthalate	ND	ND I	ND	ND	j ND	ND i
Fluoranthene	ND	ND	ND	ND	ND .	ND Ì
Pyrene	ND	ND	ND I	ND	ND	ND i
Butyl benzyl phthalate	Į ND	ND ND	480 J	ND	ND	ND i
3,3'-Dichlorobenzidine	I ND	ND	ND	ND	j nd	I ND I
Benzo(a)anthracene	j ND	I ND	ND	ND	ן אם ן	ND
bis(2-ethylhexyl)phthalate	j 55 J	,	ND	ND	j ND	j nd j
Chrysene	ND	ND.	ND	ND	ND	ן מא ן
Di-n-octyl phthalate	ND	I ND	870	ND	I ND	ND
Benzo(b)fluoranthene	ND	ND	I ND	ND	J ND	ND
Benzo(k)fluoranthene	I ND	I ND	I ND	ND	ND	I ND I
Benzo(a)pyrene	I ND	ND ND	ND	ND	ND	MD (
Indeno(1,2,3-c,d)pyrene	I ND	םא ן	I ND I	ND	ND	j nd j
Dibenz(a,h)anthracene	I ND	ND	I ND	ND	ND I	ND
Benzo(g,h,i)perylene	I ND	I ND	ND	ND	ND	ND I
TOTAL TARGETED BASE NEUTRALS **	499 #	ND	7720	ND	ND	ND
NON-TARGETED COMPOUNDS						
2,6-bis(1,1-Dimethylethyl)-4-methylphenol	ND	ND	ND I	1.8	ND	6.0
1-Fluoro-methoxy-benzene isomer	ND	ND	ND	ND	ND	4.0
3-Methyl-cyclopentanone	ND ND	ND	ND	ND	ND	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ND	I ND	ND	ND	ND i
Phosphoric acid,2-ethylhexyl diphenyl ester	j ND	ND	1300	ND i	ND	ND i
Substituted 2-propanol	j ND	ND .	ND	ND	ND	ND I
Tris(methylphenyl)phosphate isomer	j ND	ND	870	ND	ND	ND
Undecane	ND I	ND	530	ND	ND	ND i
Total methyl benzoic acid	j 440	ND	ND	ND	ND	ND j
Total unknown phthalate	j ND	ND	41730	2	ND	ND j
Total unknown propanoic acid ester	j ND j	ND	1200	ND	ND	ND j
Total unknown siloxane	j ND	ND	ND	ND	ND	2.0
Total unknown compounds	j 40	ND	6570	47.8	ND	10.4
Total other compounds	40	ND	ND	4	ND	ND
TOTAL NON-TARGETED BASE NEUTRALS **	520 #	ND	52200	55.6	ND	22.4

NOTES:

J - Trace concentrations detected below reporting limit.

^{# -} Not detected.

- NJDEP Tier I sample holding time was exceeded.

* - No field blank collected; sample collected with dedicated gas displacement sampler.

** - Includes compounds detected at trace concentrations (J).

TABLE 18-A: BASE/NEUTRAL/ACID SEMIVOLATILE ORGANICS TESTING - FIRST ROUND GROUNDWATER RESULTS BY EPA METHOD 625

LE CARPENTER, WHARTON, NEW JERSEY.

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I	1		I		1		1		i		•	ield	•	ield	١
SAMPLE ID:	•		•		•		•		•	W-12s	-	lank		lank	I
DATE SAMPLED:	19/20	0/89	19/20/	/89	19/2	20/89	19/2	0/89	19/	21/89	19/2	20/89	9/	21/89	1
	**********	88888		2200	022		:25 5 2		222		****			=====	:
PARAMETER	1		I		1		ı		ı						1
(ug/L)	ŧ		1		i		1		ı		1		ı		1
TARGETED COMPOUNDS	i		1		ı		I		1		ı		ı		ı
n-Butylbenzene	•	ND	l N		I	ND	•	ND	1	ND		ND	I	ND	ı
1-Ethy1-3-methy1benzene	•	ND	Į NI		I	ND	•	ND	!	18	!	ND	!	ND	ļ
[1,2,3,5-Tetramethylbenzene	•	ND) NI		1	ND	•	ND	1	ND	1	ND		ND	1
1,2,3,4-Tetramethylbenzene	•	ND	NE		1	ND	,	ND	l	ND	l	ND	!	ND	1
1,2,4-Trimethylbenzene	•	ND	Į NI		!	ND	•	ND	!	14	!	ND	!	ND	!
1,2,3-Trimethylbenzene	•	ND	į NI	-	!	ND	•	ND	1	ND	!	ND	I	ND	!
1,3,5-Trimethylbenzene	•	ND	j Ni		1	ND	•	ND	İ	19	l	ND	ı	ND	ı
n-Decane	•	ND	I N		1	ND	•	ND	!	ND	!	ND	ļ	ND	ļ
Styrene	•	ND	I Ni	_	!	ND	•	ND	!	ND	l	ND	I	ND	ļ
1,2-Diethylbenzene	•	ND	I NI		I	ND	•	ND	!	ND	!	ND	I	ND	١
Isopropyl benzene	•	ND	NI	-	1	ND	•	ND	I	ND	!	ND	I	ND	!
n-Nonane	•	ND	I N		1	ND	•	ND	1	ND	1	ND	!	ND	1
Phenol	•	ND	I N		1	ND	•	ND	!	ND	!	ND	ļ	ND	!
bis(2-Chloroethyl)ether	•	ND	I N		!	ND	•	ND	!	ND	!	ND	!	ND.	!
2-Chlorophenol	•	ND	N		!	ND	•	ND	!	ND	!	ND	!	ND	!
1,3-Dichlorobenzene		ND	N	_	1	ND	•	ND	!	ND	!	ND	!	ND	!
1,4-Dichlorobenzene	•	ND	į N		l	ND	•	ND	ļ	ND	!	ND	!	ND	!
1,2-Dichlorobenzene	•	ND	I N		ļ	ND	•	ND	!	ND	!	ND	!	ND	!
bis(2-Chloroisopropyl)ether	•	ND	I N	_	!	ND	•	ND	!	ND	!	ND	!	ND	!
N-Nitroso-di-n-propylamine		ND	I N	_	!	ND	•	ND	!	ND ND	!	ND	ŀ	ND ND	!
Hexachloroethane		ND	N	-	!	ND	•	ND	!	ND	!	ND ND	!	ND	!
Nitrobenzene	•	ND	N	_	!	ND	•	ND ND	!	ND	!	ND	1	ND	!
[Isophorone	•	ND	Į N		1	ND	•		!	ND	1	ND		ND	1
[2-Nitrophenol	•	ND	N	_	!	ND	•	ND	!		!		1		!
2,4-Dimethylphenol	•	ND	I N		!	76	•	ND	1	32 ND	!	ND	1	D D	!
bis(2-Chloroethoxy)methane	•	ND	N		!	ND	•	ND	!	ND	!	ND	!	ND	
12,4-Dichlorophenol	•	ND	į N	-	!	ND	•	ND	1	ND	!	ND	1	ND	
1,2,4-Trichlorobenzene	•	ND	N	_	!	ND	•	ND	!	ND	!	ND	[!
Naphthalene	•	ND	N	_	!	ND	•	ND	4	.2 J	!	ND		ND	!
Hexachlorobutadiene	-	ND	I N		!	ND	-	ND	1	ND	!	ND	!	ND	!
4-Chloro-3-methylphenol	•	ND	N	-	!	ND	•	ND	!	ND	ı	ND	!	ND	!
Hexachlorocyclopentadiene	•	ND	I N		1	ND	•	ND	!	ND		ND	!	ND	1
12,4,6-Trichlorophenol	•	ND	I N		!	ND	•	ND	!	ND	!	ND	!	ND	!
2-Chloronaphthalene	•	ND	N		!	ND	•	ND	!	ND	!	ND	!	ND	1
[Dimethyl phthalate	•	ND	N		!	ND	•	D	!	ND	!	ND	!	ND	ı
Acenaphthylene	•	ND	N		!	ND	•	ND	!	ND	!	ND	1	ND	!
Acenaphthene	!	ND	N		!	ND	•	ND	!	ND	!	ND	1	ND	ı
2,4-Dinitrophenol	į į	ND	I N		!	ND	•	ND	!	ND	!	ND	ı	ND	1
[4-Nitrophenol	ļ	ND	I N		!	ND	•	ND	ŀ	ND	1	ND	!	ND	!
2,4-Dinitrotoluene	1	ND	•	ID	ļ	ND	•	ND	I .	ND	1	ND	!	ND	1
2,6-Dinitrotoluene	Į	ND	•	0	i	ND	•	ND	!	ND	!	ND	ļ	ND	ı
Diethyl phthalate	ļ	ND	•	D	I	ND	1	ND	!	ND	!	ND	1	ND	!
4-Chlorophenyl phenyl ether	!	ND	•	ID D	1	ND	!	ND	ŀ	ND	i.	ND	I	ND	!
Fluorene	- 1	ND	I N	ID	ı	ND	ı	ND	ļ	ND	i	ND	ı	ND	ı

TABLE 18-A: BASE/NEUTRAL/ACID SEMIVOLATILE ORGANICS TESTING - FIRST ROUND GROUNDWATER RESULTS

BY EPA METHOD 625

LE CARPENTER, WHARTON, NEW JERSEY.

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	l	Ì	I	l	l	Field	Field
SAMPLE ID:	MW-8	•	MW-111	•	*	-	Blank
			9/20/89				9/21/89
PARAMETER	, 				i	I	1
(ug/L)	1	1	1	1	i	1	1
TARGETED COMPOUNDS (con't)	l	1	1	1	1	1	
4,6-Dinitro-2-methylphenol	I ND	ND	ND	ND	ND	l _{MD}	j ND
N-Nitrosodiphenylamine	l ND	ND	ND	I ND	1 13	į ND	I ND
4-Bromophenyl phenyl ether	j ND	ND	ND ND	I ND	ND	I ND	I ND
Hexachlorobenzene	j ND	I ND	ND	ND	ND	I ND	i ND
Pentachlorophenol	I ND	ND	ND	ND	1 ND	ND ND] ND
Phenanthrene	j ND	I ND) ND) ND	I ND	ND	l ND
Anthracene	l ND	ND	ND	I NO	ND	ND	Į ND
Di-n-butyl-phthalate	j ND	I ND	j ND	ND	ND	2 J	J ND
Fluoranthene	I ND	I ND	j ND	ND	I ND	I ND	J ND
Pyrene	I ND	ND ND	I ND	ND	ND	ND ND	ND
Butyl benzyl phthalate	I ND	ND	I ND	ND	ND	I ND	l ND
13,3'-Dichlorobenzidine	I ND	ND	I ND	ND	ND	ND	ND
Benzo(a)anthracene	ND	ND	J ND) ND	ND	ND	į ND
bis(2-ethylhexyl)phthalate	1100	ND	ND	j ND	320) ND	ND
Chrysene	j ND	Į ND	I ND	J NĐ	ND	j ND	[ND
Di-n-octyl phthalate	j ND	ND	, ND	ND	I ND	I ND	ND
Benzo(b)fluoranthene	ND	ND	J ND	ND I	ND.	I ND	ND
Benzo(k)fluoranthene	ND	ND	ND	J ND	j ND	į ND	ND
Benzo(a)pyrene	, ND	I ND	ND	ND	j ND	į ND	I ND
[Indeno(1,2,3-c,d)pyrene	I ND	ND] ND	ND	I ND	I ND	ND
Dibenz(a,h)anthracene	I ND	i ND	I ND	ND	I ND) ND	ND
¡Benzo(g,h,i)perylene	I ND	, I ND	ND	ND	ND	I ND	J ND
I	1	i	i	i	i	Ī	1
ITOTAL TARGETED BNAs **	1 1100	1 ND	76	I ND	418.2	2	ND
1	i	i	i	i	1	1	1
, 1	i	i	i	i	i	i	1
1	i	i	i	i	i	ì	i
INON-TARGETED COMPOUNDS	i	i	i	i	i	i	i
2,6-bis(1,1-Dimethylethyl)-4-methylphenol	LI ND	i 10	I ND	1 2	1 ND	i 4	6.0
[1-Fluoro-methoxy-benzene isomer	I ND	1 4	i ND	1 4	ND	4	4.0
3-Methyl-cyclopentanone	I ND	I ND	I ND	I ND	1 64	I ND	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	I ND	I ND	I ND	I ND	I ND	I ND	I ND
	•	I ND	I ND	i ND	I ND	i ND	I ND
Phosphoric acid,2-ethylhexyl diphenyl est	I ND	I ND	1 640	I ND	I ND	I ND	I ND
Substituted 2-propanol	•	I ND	I ND	I ND	I ND	I ND	1 ND
Tris(methylphenyl)phosphate isomer	I ND	j ND	I ND	I ND	I ND	I ND	I ND
Undecane	•	•	I ND	ם או	I ND	i ND	j KED J ND
Total methyl benzoic acid	I ND	I ND	I ND	ם או	I ND	I ND	I ND
Total unknown phthalate	I ND	1.8	•	•	1 136	I ND	I ND
Total unknown propanoic acid ester	j ND	I ND	[ND	ND	•	NU 4.4	NU 2
Total unknown siloxane	32.8	1 4	10] 3.6	ND	•	•
Total unknown compounds	52.8	1 4.2	44	1 20.8	506	J 4.6	1 10.4
[Total other compounds	ND .	I ND	12	, ND	58	I ND	l ND
1	1		1	1	1	!	1 00 4
TOTAL NON-TARGETED BNAs	85.6	24	J 706	30.4	764	1 17	22.4

NOTES: J - Trace concentrations detected below reporting limit.

ND - Not detected.

^{** -} Includes compounds detected at trace concentrations (J).

TABLE 18-A: BASE/NEUTRAL/ACID SEMIVOLATILE ORGANICS TESTING - FIRST ROUND GROUNDWATER RESULTS

BY EPA METHOD 625

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LE CARPENTER, WHARTON, NEW JERSEY.

		1	1	l	1	 	1	Field	Field
SAMPLE ID:	•	•	MW-14d	•	-	-	-	-	Blank
DATE SAMPLED:	•	•	10/24/89	•	•	-	-	-	
PARAMETER	 			 	 	 			1
(ug/L)	1	1	1	1	l	l	I	1	1
TARGETED COMPOUNDS	1	1	1	1	1	1	I	1	1
n-Butylbenzene	J ND	ND	ND	j ND	J ND	I ND	ND	ND	1 ND
1-Ethyl-3-methylbenzene	ND	ND	j ND	į ND	I ND	ND	I ND	ND	ND
1,2,3,5-Tetramethylbenzene	ND	ND	j ND	Į ND	I ND	ND.	ND	Į ND	1 ND
1,2,3,4-Tetramethylbenzene	Į ND	ND	ND	l ND	I ND	ND ND	ND	ND	ND
1,2,4-Trimethylbenzene	j ND	ND	ND	ND	ND	ND I	[ND	ND	I ND
1,2,3-Trimethylbenzene	j ND	I ND	ND	ND	l ND	ND I	Į ND	ND	1 ND
1,3,5-Trimethylbenzene	j ND	ND	ND	[ND) ND	I ND) ND	I ND	1 ND
n-Decane	ND	ND	j ND	Į ND	ND	į ND	I ND	ND ND	[ND
Styrene	J ND	ND ND	ND	l ND	ND	Į ND	ND	į ND	ND
1,2-Diethylbenzene	j ND	ND	ND	ND	ND	ND	I ND	ND	ND
Isopropyl benzene	, ND	I ND	l ND	l ND	l ND	ND	[ND	(ND	j ND
n-Nonane	I ND	, ND	, ND	l ND	ND	l ND	ND	I ND	ND
Pheno1	j ND	ND	J ND	ND.	ND	מאן	ND	, ND	ND
bis(2-Chloroethyl)ether	j ND	I ND	ND	ND	I ND	I ND	ND ND	j ND	ND
2-Chlorophenol	j ND	ND	I ND	l ND	I ND	ND	ND	ND	I ND
1,3-Dichlorobenzene	Į ND	I ND	I ND	ND	I ND	מאן	I ND	I ND	I ND
1,4-Dichlorobenzene	מא ן	I ND	J ND	ND	j ND	ND I	ND	I ND	ND
1,2-Dichlorobenzene	ND	I ND	I ND	Į ND	ND	ND	I ND	ND ND	ND
bis(2-Chloroisopropyl)ether	j ŃD	I ND	ND	ND	I ND	I ND	I ND	I ND	j ND
N-Nitroso-di-n-propylamine	ם און	I ND) ND	I ND	J ND	ND	I ND	I ND	ND
Hexachloroethane	J ND	j ND] ND	į ND	ND I	ND I	I ND	[ND	I ND
Nitrobenzene	ND	ND) ND	[ND	ND	, ND	ND ND	ND	I ND
Isophorone	j ND	I ND	I ND	I ND	I ND	ND	ND	ND	I ND
[2-Nitrophenol	į ND	I ND	1 ND	I ND	I ND	J ND	ND	ND	ND
2,4-Dimethylphenol) ND	I ND	ND	I ND	ND I	ND	ND	j ND	į ND
bis(2-Chloroethoxy)methane	j ND	j ND	l ND	I ND	I ND	ND	ND	j ND	ND
[2,4-Dichlorophenol	ND	I ND	I ND	, ND	I ND	I ND	ND ND	I ND	ND
1,2,4-Trichlorobenzene	j ND	j ND	j ND	ן אם	מאן	J ND	ND ND	l ND	I ND
Naphthalene	ND	I ND	l ND	ND ND	I ND	, ND	ND	ND	I ND
Hexachlorobutadiene	I ND	I ND	ND) ND	ND ND	ND	, ND	ND	, ND
4-Chloro-3-methylphenol	j ND	, ND	l ND	I ND	, ND	ND	j ND	I ND	, ND
Hexachlorocyclopentadiene	I ND	I ND	, ND	I ND	ND	, ND	I ND	I ND	ND
2,4,6-Trichlorophenol	I ND	, ND	I ND	, ND	ND	J ND	, ND	ND	, ND
2-Chloronaphthalene	l ND	ND	I ND	ND	l ND	ND	, ND	I ND	ND
Dimethyl phthalate	I ND	I ND	j ND	I ND	j ND	ND	l ND	ND	ND.
Acenaphthylene	I ND	l ND	I ND	I ND	, ND	ND	I ND	ND	ND
Acenaphthene	I ND	I ND	l ND	ND	I ND	I ND	I ND	I ND	ND
2,4-Dinitrophenol	l ND	I ND	I ND	I ND	I ND	ND	I ND	I ND	ND
4-Nitrophenol	I ND	I ND	I ND	I ND	I ND	I ND	I ND	I ND	I ND
2,4-Dinitrotoluene	I ND	I ND	I ND	I ND	I ND	I ND	I ND	I ND	i ND
2,6-Dinitrotoluene	I ND	I ND	ם און	I ND	ם או	I ND) ND	I ND	I ND
Diethyl phthalate	I ND	I ND	I ND	I ND	I ND	I ND	I ND	I ND	I ND
4-Chlorophenyl phenyl ether	I ND	I ND	I ND	I ND	, ND	I ND	ND	I ND	I ND
	ND	I ND	I ND	ן אם	I ND	i ND	ם או	I ND	I ND

TABLE 18-A: BASE/NEUTRAL/ACID SEMIVOLATILE ORGANICS TESTING - FIRST ROUND GROUNDWATER RESULTS

BY EPA METHOD 625

LE CARPENTER, WHARTON, NEW JERSEY,

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SAMPLE ID: DATE SAMPLED:	•	•	MW-14d 10/24/89	•	•	•	•	•	Field Blank 9//5/8
		*********				******			
PARAMETER	1	1		1		!	!	l	1
(ug/L)	!	!	!	!		!	!	!	!
TARGETED COMPOUNDS (cont)	!	1	!	!				1	1
4,6-Dinitro-2-methylphenol	I ND	ND	ND] ND	ND	I ND	ND	I ND	I ND
N-Nitrosodiphenylamine	I ND	1 ND	I ND	ND	ND	J ND	ND	I ND	I ND
4-Bromophenyl phenyl ether	ND	ND	ND	I ND	ND	I ND	I ND	ND	i ND
Hexachlorobenzene	I ND	I ND	I ND	ND I		ND ND	I ND	I ND	i ND
Pentachlorophenol	I ND	I ND	ND	ND	ND	Į ND	I ND	םא ן	I ND
Phenanthrene	ND	I ND	ND	ND	ND ND	ND ND	I ND	I ND	I ND
Anthracene	ND	I ND	1 ND	j N D	ND	ND	I ND	I ND	i ND
Di-n-butyl-phthalate	I ND	ם א	ND	I ND	ND	ND 1	l ND	ND	I ND
Fluoranthene	I ND	ND	ND	j ND	ND	ND ND	ND ND	ND ND	I ND
Pyrene] ND	ND	ND	I ND	ND	I ND	ND ND	ND	I ND
Butyl benzyl phthalate	[ND	ND	ם א	l ND	ND	l ND	j ND	ND	ND
3,3'-Dichlorobenzidine	ם או	i ND	ND	I ND	ND ND	l ND) ND	j ND	i ND
Benzo(a)anthracene	ם או	I ND	ND	מא ן	ND	l ND	I ND	I ND	ND ND
bis(2-ethylhexyl)phthalate	םא ן	ND ND	ND	ON 1	120	l ND	ND	[ND	ND
Chrysene	ם א	j ND	ם א	QN J	ND	J ND	i ND	ND	ND
Di-n-octyl phthalate	ND	j ND	[ND	ם א	ND	j ND	ND	I ND	I ND
Benzo(b)fluoranthene	מא	ND	ND	Į ND	ND	J ND	ND	I ND	l ND
Benzo(k)fluoranthene	ND	ND	į ND	I ND	ND	I ND	I ND	I ND	I ND
Benzo(a)pyrene	Į ND	j ND	į ND	I ND	ND	ND	I ND	ND	ND.
Indeno(1,2,3-c,d)pyrene	I ND	ND	[ND	[ND	ND	ND ND	ND	I ND	I ND
Dibenz(a,h)anthracene	ND	ND ND	I ND	[ND	ND	l ND	I ND	I ND	l ND
Benzo(g,h,i)perylene	I ND	ND	ND	ND	ND	ND ND	j ND	ND	l ND
	l	!	1	1]	l	ı	ı	ı
TOTAL TARGETED BNAs **	ND	ND	ND	ND	120	ND	j ND	ND	l ND
	I	ĺ	i			1	ĺ	1	1
	ĺ	i	İ	1		İ	i	i	i
NON-TARGETED COMPOUNDS	i	i	i	1		I	i	i	i
2,6-bis(1,1-Dimethylethyl)-4-methylphenol	I ND	I ND	6.0 p	I ND I	ND	I ND	I ND	I ND	I ND
1-Fluoro-methoxy-benzene isomer	I ND	I ND	I ND	I ND	ND	I ND	I ND	I ND	i ND
3-Methyl-cyclopentanone	I ND	I ND	I ND	I ND	ND .	I ND	I ND	I ND	l NC
1,1,2-Trichloro-1,2,2-trifluoroethane	I ND	L ND	I ND	I ND	ND :	I ND	I ND	I ND	I ND
Phosphoric acid,2-ethylhexyl diphenyl ester	•	I ND	I ND	I ND	ND	I ND	I ND	I ND	l ND
Substituted 2-propanol	I ND	I ND	I ND	I ND	ND	l ND	I ND	I ND	l ND
Tris(methylphenyl)phosphate isomer	I ND	I ND	I ND	ן אם	מא ן מא	I ND	I ND	I ND	ם או
Undecane	I ND	I ND	I ND	I ND	ND ND	I ND	I ND	I ND	I ND
Atrazine .	I ND	1 24	I ND	I ND		I ND	I ND	I ND	
Total methyl benzoic acid	I ND	I ND	I ND	ן אט א ן	i MD I MD	I ND	J ND	I ND	I ND
Total unknown phthalate	I ND	I ND	I ND	I ND		I ND	I ND	I ND	I ND
Total unknown propanoic acid ester	I ND	ן אם	ם און	ן אט ן מא ן	I ND I ND	מא I האי	I ND	I ND	ND
Total unknown siloxane	•	•	•	•	•	•	•	•	I NO
	I ND	ND	I ND	ND	ND I		I ND	ND	I ND
Total unknown compounds	I ND	18	I ND	I ND	ND ND	l ND	j 62	I ND	I ND
Total other compounds	10 p	1 6	i ND	I ND	ND	. ND	I ND	į ND	!
	I	1	l	1		I	I	I,	:

NOTES: p - Compound also detected in laboratory method blank.

ND - Not detected.

 $[\]ensuremath{^{**}}$ - Excludes compounds also detected in laboratory method blank (p).

BY EPA METHOD 625

LE CARPENTER, WHARTON, NEW JERSEY.

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	1.	I	1	i	Field	Field
SAMPLE ID:	MW-161	MW-16s	MW-17d	MW-17s	•	! Blank
DATE SAMPLED:	•	19/20/89	9/14/89	19/14/89	9/14/89	[9/20/89
PARAMETER				,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	1	1
(ug/L)	1	1	1	1	1	1
TARGETED COMPOUNDS		1	1	1	1	i
n-Butylbenzene	Į ND	ND	ND	1 ND) ND	I ND
1-Ethyl-3-methylbenzene	ND	ND	ND	ND	j ND	ND ND
1,2,3,5-Tetramethylbenzene	j ND	ND	ND	ND	j ND	i ND
1,2,3,4-Tetramethylbenzene	ND	[ND	ND	ND ND	ND	I ND
1,2,4-Trimethylbenzene	j ND	Į ND	I ND	I ND	ND	ND
1,2,3-Trimethylbenzene	j ND	l ND	j ND	I ND	j ND	I ND
1,3,5-Trimethylbenzene	į ND	j ND	I ND	ND	ND	Į ND
n-Decane) ND	ND	ND	l ND	J ND) ND
Styrene	j ND	[ND	J ND	ND	ND	j ND
1,2-Diethylbenzene	J ND	, ND	I ND	ND	l ND	j ND
Isopropyl benzene	ND	I ND	ND ND	l ND	I ND	I ND
n-Nonane	DND	, ND	, ND	, ND	I ND	ND
Pheno1	ND	, ND	, ND	, ND	ND	ND
bis(2-Chloroethyl)ether	ND	מא ן	, ND	I ND	ND	J ND
2-Chlorophenol	j ND	ND	J ND	ND	ND	I ND
1,3-Dichlorobenzene	j ND	j ND	, ND	I ND	j ND	Į ND
1,4-Dichlorobenzene	I ND	, ND	ND ND	I ND	ND	1 ND
1,2-Dichlorobenzene	j ND	ND	ND	ND	ND	į ND
bis(2-Chloroisopropyl)ether	ND	ND	I ND	I ND	ND) ND
N-Nitroso-di-n-propylamine	j ND	ND	J ND	ND	ND	1 ND
Hexachloroethane	j ND	ND ND	ND	ND	Į ND	J ND
Nitrobenzene	j ND	ND	ND	ND	ND) ND
Isophorone	j N D] ND	ND	ND	I ND	I ND
2-Nitrophenol	I ND	I ND	I ND	ND ND	I ND	ND
2,4-Dimethylphenol	i ND	, ND	I ND	I ND	ND	j ND
bis(2-Chloroethoxy)methane	I ND	I ND	I ND	, ND	J ND	I ND
2.4-Dichlorophenol	. I ND	I ND	i ND	I ND	I ND	, ND
1,2,4-Trichlorobenzene	I ND	I ND	t ND	I ND	, I ND	, ND
Naphthalene	I ND	I ND	1 ND	1 ND	I ND	I ND
Hexachlorobutadiene	I ND	l ND	I ND	I ND	I ND	I ND
4-Chloro-3-methylphenol	l ND	I ND	I ND	I ND	I ND	I ND
Hexachlorocyclopentadiene	I ND	I ND	I ND	I ND	ND ND	I ND
2.4.6-Trichlorophenol	I ND	I ND	I ND	I ND	I ND	I ND
2-Chloronaphthalene	I ND	I ND	I ND	1 ND	I ND	I ND
Dimethyl phthalate	I ND	I ND	I ND	I ND	I ND	I ND
Acenaphthylene	i ND	I ND	I ND	I ND	I ND	I ND
•	į ND	I ND	I ND	I ND	ם וו	I ND
Acenaphthene	I ND	I ND	i ND	I ND	I ND	I ND
2,4-Dinitrophenol	ם און מאון	I ND	I ND	I ND	I ND	I ND
4-Nitrophenol	i ND	I ND	I ND	i ND	I ND	I ND
2,4-Dinitrotoluene	I ND	I ND	I ND	I ND	I ND	I ND
2,6-Dinitrotoluene	•	ו אם	I ND	I ND	I ND	i ND
Diethyl phthalate	I ND	עא ן מאו	ם או	I ND	i ND	I ND
4-Chlorophenyl phenyl ether	ND	•	•	I ND	I ND	UND I
Fluorene ===================================	I ND	I ND	l ND		•	•

SAMPLE ID: DATE SAMPLED: PARAMETER (ug/L) TARGETED COMPOUNDS (cont.) 4,6-Dinitro-2-methylphenol N-Nitrosodiphenylamine 4-Bromophenyl phenyl ether	9/20 	0/89	9/	20/89	-	9/14/89	9/14/89	
PARAMETER (ug/L) TARGETED COMPOUNDS (cont.) 4,6-Dinitro-2-methylphenol N-Nitrosodiphenylamine	 		-		-			
PARAMETER (ug/L) TARGETED COMPOUNDS (cont.) 4,6-Dinitro-2-methylphenol N-Nitrosodiphenylamine	1 1 1		=== 	8555TB		8205355		
(ug/L) TARGETED COMPOUNDS (cont.) 4,6-Dinitro-2-methylphenol N-Nitrosodiphenylamine	•		1			:	1	 I
TARGETED COMPOUNDS (cont.) 4,6-Dinitro-2-methylphenol N-Nitrosodiphenylamine	•				l ì	1	1	1
4,6-Dinitro-2-methylphenol N-Nitrosodiphenylamine	•		:		! !		1	1
N-Nitrosodiphenylamine	•	ND	!	ND	I ND	I ND	! I ND	I ND
• •		ND	ì		I ND	I ND	I ND	I ND
	1	ND	1		I ND	I ND	I ND	I ND
Hexachlorobenzene	•	ND	i		I ND	I ND	1 ND	I ND
Pentachlorophenol	•	ND	i		I ND	I ND	i ND	I ND
Phenanthrene	•	ND	i	ND	I ND	I ND	I ND	I ND
Anthracene	•	ND	i	ND	I ND	I ND	I ND	I ND
Di-n-butyl-phthalate	•	ND	i	ND	ם או	I ND	I ND	1 2 J
Fluoranthene	•	ND	i	ND	I ND	I ND	I ND	I ND
Pyrene	•	ND	i		i ND	I ND	I ND	I ND
Butyl benzyl phthalate	•	ND	i	ND	I ND	I ND	I ND	I ND
3,3'-Dichlorobenzidine	•	ND	, I	ND	מא ן	I ND	I ND	I ND
Benzo(a) anthracene	•	ND	i	ND	I ND	I ND	I ND	I ND
bis(2-ethylhexyl)phthalate	•	ND	i	ND	ND	I ND	I ND	, ND
Chrysene	•	ND	i	ND	I ND	I ND	I ND	, ND
Di-n-octyl phthalate	•	ND	i	ND	I ND	I ND	, ND	I ND
Benzo(b) fluoranthene	•	ND	ì	ND	I ND	I ND	I ND	I ND
Benzo(k)fluoranthene	•	ND	i	ND	i ND	I ND	I ND	I ND
Benzo(a) pyrene	•	ND	i	ND	I ND	I ND	i ND	I ND
Indeno(1,2,3-c,d)pyrene	•	ND	i	ND	I ND	I ND	I ND	I ND
Dibenz(a,h)anthracene	•	ND	i	ND	I ND	I ND	I ND	I ND
Benzo(g,h,i)perylene	•	ND	i	ND	I ND	I ND	I ND	I ND
50/120 (9/1/12/2013	i		i		1	i	1	i
TOTAL TARGETED BNAs **	i	ND	i	ND	I ND	i ND	I ND	I 2
	i		i		i	i	i	i
	i		i		i	i	i	i
	i		i		i	i	i	i
NON-TARGETED COMPOUNDS	i		i		I	ì	1	i
2,6-bis(1,1-Dimethylethyl)-4-methylphenol	i	ND	ì	ND	t ND	t ND	I ND	1 4
1-Fluoro-methoxy-benzene isomer	;	ND	i	ND	l ND	ND	I ND	1 4
3-Methyl-cyclopentanone	;	ND	ï	ND	I ND	I ND	I ND	i ND
1.1.2-Trichloro-1,2,2-trifluoroethane	•	ND	ï	2	I ND	I ND	i ND	I ND
Phosphoric acid,2-ethylhexyl diphenyl este	•	ND	:	ND	i ND	I ND	I ND	I ND
Substituted 2-propanol		ND	;	ND	I ND	1 ND	I ND	I ND
Tris(methylphenyl)phosphate isomer	-	ND	:	ND	I ND	I ND	I ND	I ND
Undecane	1	ND	1	ND	I ND	I ND	I ND	I ND
Total methyl benzoic acid	-	ND	;	ND	I ND	I ND	ו אם	ם או
Total unknown phthalate	;	ND	1	4	I ND	I ND	I ND	I ND
Total unknown propanoic acid ester	-	ND	i E	ND	I ND	I ND	I ND	ם ו
Total unknown propanoic acid ester Total unknown siloxane	1	ND	1	10	I ND	(ND	I ND	1 4.4
Total unknown siloxame Total unknown compounds	1	56	1	62	I ND	I ND	i ND	1 4.6
•	1	NĎ	1	ND	I ND	I ND	I ND	I ND
Total other compounds	1	NU	ı	NU	ן מט	1 170	ן אט	1 140
 TOTAL NON-TARGETED BNAS	1	56	1	78	I I ND	I ND	I ND	1 17

NOTES: J - Trace concentrations detected below reporting limit.

ND - Not detected.

^{** -} Includes compounds detected at trace concentrations (J).

TABLE 18-A: BASE/NEUTRAL/ACID SEMIVOLATILE ORGANICS TESTING - FIRST ROUND GROUNDWATER RESULTS
BY EPA METHOD 625

LE CARPENTER, WHARTON, NEW JERSEY.

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		ı	ı	Production	il trera	Field
SAMPLE ID:	MW-18d	MW-181	MW-18s	Well	Blank	Blank
DATE SAMPLED:	•	•	9/15/89	•	9/15/89	•
PARAMETER	; 	:=====================================	.esaseses 		 	
(ug/L)	ì	İ	i	i	ì	i
FARGETED COMPOUNDS	İ	İ	İ	i	Ì	i
n-Butylbenzene	ND	ND	ND	, ND	l ND	, ND
l-Ethyl-3-methylbenzene	ND	j ND	ND	l ND	l ND	I ND
1,2,3,5-Tetramethylbenzene	j ND	I ND	ND	l ND	ND	I ND
1,2,3,4-Tetramethylbenzene	j ND	ND	I ND	l ND	ND	I ND
I,2,4-Trimethylbenzene	J ND	[ND	I ND	J ND	ND	I ND
1,2,3-Trimethylbenzene	į ND	ND	j ND	j ND	J ND	ND
l,3,5-Trimethylbenzene	j ND	i ND	j ND	j ND	l ND	[ND
n-Decane	ND	[ND	ND	ND	ND	I ND
Styrene	j ND	ND	ND	j ND	ND	I ND
1,2-Diethylbenzene	, ND	I ND	I ND	ND	, ND	l ND
Isopropyl benzene	j ND	ND	I ND	I ND	ND	I ND
n-Nonane	j ND	I ND	ND	, I ND	ND.	, ND
Phenol	I ND	ND	ND	I ND	I ND	I ND
ois(2-Chloroethyl)ether	į ND	J ND	J ND	I ND	I ND	I ND
2-Chlorophenol	[ND	I ND	ND	, ND	I ND	I ND
1,3-Dichlorobenzene	ND	I ND	, ND	ND	ND	[ND
1,4-Dichlorobenzene	I ND	j ND	, ND	ND ND	ND	I ND
1,2-Dichlorobenzene	[ND	J ND	i ND	l ND	l ND	I ND
ois(2-Chloroisopropyl)ether	ND	ND	J ND	D	l ND	I ND
N-Nitroso-di-n-propylamine	I ND	j ND	I ND	I ND	I ND	i ND
Hexachloroethane	j ND	I ND	, ND	ND	ND	I ND
Nitrobenzene	I ND	I ND	ND	ND	ND	I ND
Isophorone	j ND	ND	ND .	ND	l ND	ND
2-Nitrophenol	I ND	I ND	I ND	ND ND	I ND	I ND
2,4-Dimethylphenol	i ND	I ND	ND I	I ND	I ND	I ND
bis(2-Chloroethoxy)methane	i ND	I ND	I ND	I ND	I ND	I ND
2,4-Dichlorophenol	I ND	I ND	I ND	I ND	I ND	I ND
1.2.4-Trichlorobenzene	I ND	I ND	I ND	I ND	l ND	I ND
Naphthalene	I ND	I ND	I ND	I ND	L ND	I ND
Hexachlorobutadiene	į ND	I ND	ND	, I ND	i ND	I ND
4-Chloro-3-methylphenol	· [ND	I ND	I ND	I ND	i ND	I ND
Hexachlorocyclopentadiene	I ND	I ND	I ND	I ND	I ND	I ND
2,4,6-Trichlorophenol	I ND	l ND	I ND	I ND	I ND	I ND
2-Chloronaphthalene	I ND	I ND	I ND	I ND	I ND	I ND
Dimethyl phthalate	I ND	ם או	I ND	I ND	I ND	I ND
Acenaphthylene	I ND	I ND	I ND	I ND	I ND	I ND
Acenaphthene	J ND	I ND	ו DND	I ND	I ND	I ND
2,4-Dinitrophenol	ן אם ן. מא	I ND	•		•	•
2,4-binitrophenoi 4-Nitrophenol	•	I ND	ND	l ND	I ND	I ND
4-Nitrophenoi 2,4-Dinitrotoluene	j ND	•	I ND	ND ND	ND ND	I ND
	j ND	ND	ND	ND ND	ND	i ND
2,6-Dinitrotoluene	I ND	ND	ND	ND ND	J ND	ND
Diethyl phthalate	j ND	I ND	ND	ND ND	I ND	I ND
4-Chlorophenyl phenyl ether Fluorene] ND	I ND	I ND	ND	I ND	I ND

TABLE 18-A: BASE/NEUTRAL/ACID SEMIVOLATILE ORGANICS TESTING - FIRST ROUND GROUNDWATER RESULTS
BY EPA METHOD 625

LE CARPENTER, WHARTON, NEW JERSEY

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	1	l	I	Production	Field	Field
SAMPLE ID:	MW-18d	MW-18i	MW-18s	Well	Blank	Blank
DATE SAMPLED:	9/15/89	9/15/89	9/15/89	1	9/15/89	9/24/89
PARAMETER	!	1		!	!	
(ug/L)			ļ .	1	<u> </u>	
TARGETED COMPOUNDS (cont.)	1	1	I	1	l 	1
4,6-Dinitro-2-methylphenol	I ND	I ND	I ND] ND	I ND	I ND
N-Nitrosodiphenylamine	I ND	ND	[ND	J ND	I ND	I ND
4-Bromophenyl phenyl ether	ND.	I ND	1 ND	I ND	l ND	I ND
Hexachlorobenzene	I ND	ם או	I ND	I ND	ND	I ND
Pentachlorophenol	ND ND	I ND	ם או	l ND	I ND	ND
Phenanthrene	j ND	ND ND	I ND	ND	ND	ND ND
Anthracene	I ND	l ND	i ND	I ND	I ND	I ND
Di-n-butyl-phthalate	ND	ND	I ND	I ND	I ND	I ND
Fluoranthene	1 ND	I ND	I ND	I ND	I ND	ND
[Pyrene	j ND	ND	j ND	ND	l ND	I ND
Butyl benzyl phthalate	j ND	j ND	ND ND	ND	ND	I ND
3,3'-Dichlorobenzidine	ND	I ND	j ND	j ND	j ND	I ND
Benzo(a)anthracene	1 ND	םא ן	I ND	I ND	l _N D	I ND
bis(2-ethylhexyl)phthalate	j ND	Į ND	ND	I ND	ND ND	I ND
Chrysene	I ND	j ND	l ND	j ND	I ND	į ND
Di-n-octyl phthalate	ND	I ND) ND	l ND	[ND) ND
Benzo(b)fluoranthene) ND	I ND	J ND	l ND	I ND	ND
Benzo(k)fluoranthene	ND	ND	ND	I ND	I ND	[ND
Benzo(a)pyrene	ND	j ND	1 ND	ND	I ND	I ND
Indeno(1,2,3-c,d)pyrene	ND	I ND	į ND	Į ND	ND) ND
Dibenz(a,h)anthracene	j ND	[ND) ND	[ND	ND	I ND
[Benzo(g,h,i)perylene	ND	ND	j ND	į ND	ND	ND
1	1	1	1	1	1	1
Itotal targeted bnas	, ND	, ND	I ND	j ND	ND	ND
,	i	ì	i	ì	İ	1
! !	i	i	i	i	İ	i
INON-TARGETED COMPOUNDS	i	i	i	i	i	i
[2,6-bis(1,1-Dimethylethyl)-4-methylphenol	, I ND	I ND	, ND	I ND	I ND	1 6.0 p
11-Fluoro-methoxy-benzene isomer	I ND	I ND	I ND	I ND	I ND	I ND
3-Methyl-cyclopentanone	I ND	I ND	I ND	I ND	i ND	1 ND
11,1,2-Trichloro-1,2,2-trifluoroethane	I ND	I ND	i ND	i ND	1 ND	I ND
Phosphoric acid,2-ethylhexyl diphenyl ester	I ND	I ND	l ND	i ND	I ND	I ND
•	I ND	I ND	I ND	ו אם	IND	1 ND
Substituted 2-propanol	I ND	I ND	I ND	I ND	I ND	I ND
Tris(methylphenyl)phosphate isomer	•	•	I ND	I ND	I ND	I ND
Undecane	I ND	I ND	•	•	•	I ND
Total methyl benzoic acid	I ND	I ND	ם און	ND	ND	I ND
Total unknown phthalate	I ND	I ND	l ND	I ND	I ND	•
Total unknown propanoic acid ester	I ND	ND	I ND	I ND	I ND	I ND
Total unknown siloxane	ND	ND	I ND	I ND	I ND	ND
Total unknown compounds	ND	7.5	I ND	I ND	ND	ND
Total other compounds	I ND	ND	I ND	ND	5.0 p	I ND
1	1	1	I		I	1
TOTAL NON-TARGETED BNAs **) ND	7.5	l ND	I ND	ND	I ND

NOTES: p - Compound also detected in laboratory method blank.

ND - Not detected.

^{** -} Excludes compounds also detected in laboratory method blank (p).

TABLE 18B

BASE/NEUTRAL/ACID SEMIVOLATILE ORGANICS TESTING - SECOND ROUND GROUNDWATER RESULTS

TABLE 18-B: BASE/NEUTRAL/ACID SEMIVOLATILE ORGANICS TESTING - SECOND ROUND GROUNDWATER RESULTS BY EPA METHOD 625

L.E. CARPENTER, WHARTON, NEW JERSEY

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	MW-1 1/25/90	 MW-2 1/24/90	 MW-3 1/24/90	 MW-4 1/24/90	 MW-5 1/24/90		 MW-7 1/25/90	 MW-8 1/25/90	FIELD BLANK 1/24/90	FIELD BLANK 1/25/90	TRIP BLANK 1/24/90	TRIP BLANK 1/25/90
PARAMETER* (ug/L)	=== ==== 	======= 	======== 	 	====== 	=======	======== 		=======	*******	======= 	
bis(2-Ethylhexyl)phthalate	22	1 1 7.0 J	i i 38000	1 1 3.6 J	17	(0000 0	!		! !		! !	
Butyl benzyl phthalate	I ND	ND I	110	I ND	I ND	62000 D 160	4100 D	540 D] 3.3 J	3.3 J	I ND	ND
In-Buty1benzene	1 6.0 JD	ND	1 24	I ND	I ND	ND ND	ND 6.8 J	I ND	ND j	ND	ND	ND
In-Decane	6.3 JD	ND DN	1000	ND .	ם און	3100 D		ND	ND j	ND	ND	ND
11.2-Diethylbenzene	15 JD	8.8 J	1 21	I ND	I ND	100 D	47 28	16 J	ND j	ND	ND	ND j
Di-n-butyl phthalate	I ND	ND	110	I ND	ו אם מאו	ND D	28 ND	I ND I ND	ND I	ND	ND i	ND [
Di-n-octyl phthalate	ND	I ND	200	ND	I ND	120	1 32	ND I	ND	ND	I ND	ND j
1-Ethy1-3-methy1benzene	260 D	21	140	ND	ND	420 D	1110	10 J	I ND I	ND ND	I ND	ND
Isopropyl benzene	32 D	41	84	ND	I ND	100 D	48	11 J	ו מאו	ND ND	ND I	ND [
Naphthalene	ND	ND	2.7 J	ND	I ND	IND	I ND	ND	ן שאן ו מאו	ND ON	ND i	ND j
n-Nonane	ND	ND	310	ND	ND ON	520 D	33	ND i	ו מאו	ND	I ND j	ND
11,2,3,4-Tetramethylbenzene	ND	ND	7.2 J	ND	ND	ND I	4.4 J	ND I	ND I	ND	ND ND	ND [
11,2,3,5-Tetramethylbenzene	ND	ND i	ND	ND	ND I	ND:	ND ND	ND I	ND I	אם מא		ND j
11,2,3-Trimethylbenzene	210 LD	38 L	210 L	ND	ND I	320 LD	110 L	ND I	ן מאו	ND ON	ND I	ND I
11,2,4-Trimethylbenzene	210 LD	38 L	210 L	ND I	ND	320 LD	110 L	ND I	ND I	ND I	IND j	ND I
[1,3,5-Trimethylbenzene	430 D	ND I	280	ND	ND	490 D	110	6.3 J	ND I	ND I	ו מא	ND I
2,4-Dimethylphenol	38 I	2.8 J	15	ND	ND D	180	4.1 J	ND I	ו מא	עם D III	ו מאו	ND
Phenol	130 I	ND i	ND	ND i	ND	68	ND I	ND D	ND I	ND I	ו מאן	ND j
2-Nitrophenol	8.8 JI	ND	ND	ND	ND	ND	ND	ND	ND	ND ON	ND I	ND ND
TOTAL TARGETED B/N **	1368	157	40723	3.6	17	67898	4743	583	3.3	3.8	ND I	ND
Benzoic Acid	ND	ND	ND I	ND I	I ND I	13	ND I	ND I	ND I	ND I	ND I	ND I
C8H10 isomer	ND j	340 j	ND j	ND j	ND i	ND i	ND i	ND I	ND i	ND I	ND I	ND I
C9H12 isomers	I ON j	130	ND j	ND i	ND i	ND i	ND i	ND I	ND I	ND I	ND I	ND I
C10H20 isomer	ND j	ND j	ND į	ND j	ND i	770	ND i	ND i	ND I	ND	ND I	ND I
C10H22 isomer	ND j	ND j	ND j	ND j	ND i	1200 i	ND i	ND i	ND I	ND I	ND I	ND I
C11H24 isomers	ND j	ND į	ND j	ND j	ND i	1930	ND i	ND i	ND i	ND I	ND I	ND I
C2-Benzene Isomers	1100	ND j	ND j	ND į	ND j	8380 i	ND i	ND I	ND I	ND I	ND I	תא מא
C3-Benzene Isomers	147	ND I	ND i	ND j	ND i	480 i	240	ND i	ND i	ND I	ND I	ND I
Dimethylbenzene isomer	ND į	ND į	320 j	ND j	ND į	ND i	ND i	ND i	ND i	ND I	ND i	ND I
Methylpropyl benzene isomer	ND j	ND j	ND į	ND j	ND j	430 i	ND i	ND i	ND I	ND I	ND I	ND I
4-Methyl phenol	51 j	ND j	4.9	ND j	ND i	330 i	2.3	ND i	ND I	ND i	ND I	ND I
Ethylmethyl benzene isomers		ND j	ND i	ND j	ND j	ND i	ND I	ND i	ND I	ND I	ND I	ו מא
Unknown alkanes	ND j	ND j	ND j	ND j	ND j	5390	ND i	ND I	ND i	ND I	ו סא	ND I
Unknown phthalates	ND į	ND j	ND j	ND j	ND j	390 j	ND	ND i	ND	ND I	ND I	ND I
Total unknown compounds 	920 j	330	ND j	ND į	ND į	2360	4300	ND	ND	ND	ND	ND
TOTAL NON-TARGETED B/N **	2376	800	325	ND	ND I	21660	4542	ND I	ND	ND I	ND I	ND I

NOTES: J - Trace concentration detected below reporting limit.

D - Compound identified at a secondary dilution
L - Compound not separable using this method and therefore quantified together
I - Surrogate recovery for this sample was below control limits due to a sample matrix interference.

ND - Not detected

^{* -} Parameters which were not detected in any of the second round ground water analyses are not listed here.
** - Includes compounds detected at trace concentrations (J).

TABLE 18-B: BASE/NEUTRAL/ACID SEMIVOLATILE ORGANICS TESTING - SECOND ROUND GROUNDWATER RESULTS BY EPA METHOD 625 L.E. CARPENTER, WHARTON, NEW JERSEY

 SAMPLE ID:	 MW-9	MW-10	MW-11d	 MW-111	 MW-121	 MW-12s	FIELD BLANK	FIELD BLANK	FIELD BLANK	TRIP BLANK	TRIP BLANK	TRIP BLANK	
DATE SAMPLED:	1/24/90	1/24/90	1/25/90	1/25/90	1/25/90	1/25/90	1/24/90	1/25/90					ļ
PARAMETER*	 	 		 	======= 	======= 	======= 			a======			
bis(2-Ethylhexyl)phthalate	48	34000 D	3600 D	ND	77	5300	3.3 J	3.3 J	ND	ND	ND .	ND	i
Butyl benzyl phthalate	ND	350 D	ND	ND	j ND	j ND	I ND	ND i	ND	ND	ND	ND	İ
n-Butylbenzene	ND	27	ND	ND	ND	ND	i ND	ND	ND	ND	ND	ND	Ĺ
n-Decane	ND	2400	ND	ND	ND	6.9 J	ND 1	ND	ND	ND	ND	ND	Ĺ
1,2-Diethylbenzene	ND	13	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	Ĺ
Diethylphthalate	ND	ND	2.2	ND	j ND	ND	ND	ND j	ND	ND	ND	ND	Ĺ
Di-n-butyl phthalate	ND	12	ND	j ND	ND	200	ND	ND	ND [ND	ND	ND	Ĺ
Di-n-octyl phthalate	ND	89	ND	ם א	ND	j 61	ND	ND	ND	ND	ND	ND	İ
1-Ethyl-3-methylbenzene	ND	180	ND	ND	ND	į 2.3 J	ND	ND	ND [ן מא ן	ND	ND	Ĺ
Isopropyl benzene	ND	80	ND	ND	ND	ND	ND	ND	ND	ND I	ND	ND	İ
Naphthalene	ND	ND	ND	ND	ND	j 3.5 J	ND	ND	ND j	ND	ND	ND	Ĺ
N-Nitrosodiphenylamine	ND	ND	22	ND	ND	ND	ND	ND	ND [ND	ND	ND	Ì
n-Nonane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	Ĺ
1,2,3,4-Tetramethylbenzene	ND	10	ND	ND	ND	230	ND	ND	ND	ND	ND	ND	Ĺ
1,2,3,5-Tetramethylbenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	Ĺ
1,2,3-Trimethylbenzene	ND	240 L	ND:	ND:	ND	290	ND.	ND	ND	ND	ND:	ND .	İ
1,2,4-Trimethylbenzene	ND	240 L	ND	j 5.2 J	ND	49 q	ND	ND	ND	ND	ND	ND	İ
1,3,5-Trimethylbenzene	ND	490	ND	ND	ND	12 q	ND	ND	ND (ND	ND	ND	İ
2,4-Dimethylphenol	ND	86	ND	ND	ND	j ND `	ND	ND	ND	ND	ND	ND	İ
Pheno1	ND	120	ND	ND	ND	ND	ND	ND	21	ND	ND	ND	İ
2-Nitrophenol	ND	ND	ND	ND	ND	j ND	ND	ND	ND I	ND	ND	ND	İ
TOTAL TARGETED B/N **	48	38337	3624	50.9	77	6154.7	3.3	3.8	21	ND	ND	ND	İ
Benzoic Acid	ND	ND	ND	ND	ND	5.6	ND	ND	ND	ND	ND	ND	i
Benzyl Alcohol	ND	ND	ND	j NĐ	ND	2.5	ND	ND	ND i	ND	ND	ND	i
2,6-bis(1,1-dimethylethyl)-	ĺ	i	i i	İ	Ì	i	i i		i	i			ĺ
4-methyl phenol	7.2	ND	ND	ND	ND	i ND	ND	ND	ND I	ND	ND	ND	i
C8H1O isomer	ND	1900	ND	ND	CN i	j 1100	i ND	ND	ND i	ND	ND	ND	i
C10H22 isomer	ND i	340	ND	i ND	i ND	i ND	i ND	ND	ND i	ND i	ND i	ND	ĺ
C3-Benzene Isomers	ND	ND I	ND	NÐ	ND	220	ND	ND	ND i	ND	ND	ND	i
Ethanol, 2-chlorophosphate (3:1)	ND	·ND	110	830	j 14	ND	i ND	ND	ND i	ND	ND	ND	Ĺ
Ethylmethyl benzene isomers	ND	790	ND	ND	i ND	ND ON	i ND	ND	ND i	ND	ND	ND	i
Methylbenzoic acid isomer	ND	ND i	ND	ND	i ND	i 720	i ND	ND i	ND i	ND	ND	ND	i
2-Methyl naphthalene	ND	ND i	ND	ND	i ND	4.7	i ND	ND	ND i	ND	ND	ND	i
4-Methyl phenol	ND	81	ND	ND	ND	62.8	I ND	ND	ND	ND	ND	ND	i
Substituted cyclohexane	ND	370 i	ND	i ND	ND	ND	ND	ND	ND I	ND	ND	ND	i
Sulfur	990	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	í
Unknown alkanes	ND	3180	ND	ND	ND	ND	ND	ND	ND I	ND	ND	ND	í
Unknown phthalates	ND	2080	ND	ND	ND	180	ND	ND	ND I	ND	ND	ND	i
Total unknown compounds	ND	2262	ND	ND	ND	6310	ND	ND	ND	ND	ND	ND	į
TOTAL NON-TARGETED B/N **	997	11031	110	 830	 14	 8606	ND	ND	ND I	ND	ND	ND	

NOTES: J - Trace concentration detected below reporting limit.
D - Compound identified at a secondary dilution
L - Compound not separable using this method and therefore quantified together q - Surrogate recovery for this sample was below control limits.
ND - Not detected

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TABLE 18-B: BASE/NEUTRAL/ACID SEMIVOLATILE ORGANICS TESTING - SECOND ROUND GROUNDWATER RESULTS BY EPA METHOD 625 L.E. CARPENTER, WHARTON, NEW JERSEY

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 SAMPLE ID: DATE SAMPLED:	MW-131 1/23/90	MW-13s 1/23/90	MW-14d 1/23/90	MW-141 1/23/90	MW-14s 1/23/90	MW-15s 1/23/90	MW-161 1/22/90	 MW-16s 1/22/90	FIELD BLANK 1/22/90	FIELD BLANK 1/23/90	TRIP BLANK 1/22/90	TRIP BLANK 1/23/90
PARAMETER*	i											
j (ug/L)				i	i i	j i		i i		ì		i i
bis(2-Ethylhexyl)phthalate	ND	ND	ND	ND	790	ND	2.4 J	ND	ND	ND I	ND	i ND j
Butyl benzyl phthalate	ND	ND	ND	ND	J ND [ND	ND	ND	ן מאן	ND	ND	I DO I
n-Butylbenzene	ND	ND	ND	ND	ND [ND	ND	j ND j	ND	ND j	ND	ND
n-Decane	ND	ND	ND	ND	ND	ND	ND	[DM]	ND J	ND [ND	J ND J
1,2-Diethylbenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND [ND I	ND	ND
Di-n-butyl phthalate	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND I
Di-n-octyl phthalate	ND	ND	ND	ND	2.8 J	ND	ND	ND	ND	ND	ND	ן מאן
1-Ethyl-3-methylbenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND I	ND	ND
Isopropyl benzene	ND	ND	ND	ND	ND	ND	ND	ND	ND I	ND I	ND	ND I
Naphthalene	ND	ND	ND !	ND	ND	ND	ND	ND	ND [ND I	ND	ND I
In-Nonane	ND ND	ND	ND	ND I	ND I	ND	ND (ND I	ND I	ND I	ND	ND
[1,2,3,4-Tetramethylbenzene] [1,2,3,5-Tetramethylbenzene]	I ND	מאו מאו	ND	ND I	I ND I	ND	ND ND	ND I	ND I	ND I	ND	ND
11.2.3-Trimethylbenzene	I ND:	ND I	ו שא ן ND I	IND I	ו מאו	טא ן מא	ן מא ן עא ן	ND I	ND I	ND I	ND I	ND
11,2,4-Trimethylbenzene	ND	ND I	ND I	ייאן מאו	ן אט ן ND I	ND I	ן עא ן עא ן	IND I	ן לא ן ו לא	ND I	ND	ND I
11,3,5-Trimethylbenzene	ND	ND	ND I	ND	ו מאו	ND:	DD	ND D	ND I	ND I	ND	IND I
2,4-Dimethylphenol	ND	ND	ND	ND	I ND I	ND I	ND I	מא	ND I	ND I	ND I	ND I
iPhenol	ND	ND	ND	ND	ND I	ND I	ND I	I ND I	ND I	ND 1	ND ON	ND I
12-Nitrophenol	ND ON	ND	ND	ND	ND I	מא ו	ND	I ND I	ו מא	ND I	ND	ND I
1	,,,,	.,,,,	,,,,,	, ,,,	,,,,	,,,,	110	No	ו מייי	ND	שא	ן טא
TOTAL TARGETED B/N **	ND	ND	ND	ND	793	ND	ND	ND	ND	ND	ND	ND
Ethanol.2-				}	}							!
-chlorophosphate(3:1)	ND I	ND I	ND	ND I	ם א	13	ND	I ND	מא ו	ND I	ND	ND I
Substituted phenol	ND	340	ND	ND	ND I	ND I	ND	ND I	ND I	ND I	ND	ND I
i '			· ·-	-								
TOTAL NON-TARGETED B/N **	MD	340	ND	ND	ND	13	ND	ND	ND	ND	ND	ND

NOTES: J - Trace concentration detected below reporting limit.

ND - Not detected

* - Parameters which were not detected in any of the second round ground water analyses are not listed here.
** - Includes compounds detected at trace concentrations (J).

TABLE 18-8: BASE/NEUTRAL/ACID SEMIVOLATILE ORGANICS TESTING - SECOND ROUND GROUNDWATER RESULTS BY EPA METHOD 625

L.E. CARPENTER, WHARTON, NEW JERSEY

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 SAMPLE ID: DATE SAMPLED:	MW-17d 1/23/90	MW-17s	MW-18d 1/22/90	MW-18i 1/22/90	MW-18s 1/22/90		1/22/90	FIELD BLANK 1/23/90		TRIP BLANK 1/22/90		:
PARAMETER* (ug/L) bis(2-Ethylhexyl)phthalate Butyl benzyl phthalate n-Butylbenzene n-Decane 1,2-Diethylbenzene Di-n-butyl phthalate Di-n-octyl phthalate 1-Ethyl-3-methylbenzene Isopropyl benzene Naphthalene n-Nonane 1,2,3,4-Tetramethylbenzene 1,2,3-Trimethylbenzene 1,2,3-Trimethylbenzene 1,2,4-Trimethylbenzene 1,3,5-Trimethylbenzene 1,4-Bimethylphenol 1,4-Bimethylphenol	ND ND ND ND ND ND ND ND ND ND ND ND ND N			ND	ND	ND ND ND ND ND ND ND ND	ND ND ND ND ND ND ND ND ND ND ND ND ND N	NO NO NO NO NO NO NO NO NO NO NO NO NO N	ND ND ND ND ND ND ND ND ND ND ND ND ND N	ND ND ND ND ND ND ND ND ND ND ND ND ND N	ND ND ND ND ND ND ND ND ND ND ND ND ND N	ND ND ND ND ND ND ND ND
2-Nitrophenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
TOTAL TARGETED B/N **	ND	ND	ND	מא	ND	ND	ND	ND	ND	ND ND	ND ND	ND
Ethanol,2- -chlorophosphate(3:1)	ND .	ND	ND	43	ND	ND	ND	ND	21	ND	ND	ND
TOTAL NON-TARGETED B/N **	ND .	I ND	ND I	43	i ND	ND	ND	ND	ND	ND	ND	ND j

NOTES: ND - Not detected

^{* -} Parameters which were not detected in any of the second round ground water analyses are not listed here.
** - Includes compounds detected at trace concentrations (J).

TABLE 19A

PRIORITY POLLUTANTS METALS AND OTHER INORGANICS - FIRST ROUND GROUNDWATER RESULTS

TABLE 19-A: PRIORITY POLLUTANTS METALS AND INORGANICS - FIRST ROUND GROUNDWATER RESULTS LE CARPENTER, WHARTON, NEW JERSEY-

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=		===	:=======			3 -					Pag	е	T Of 2	_
ı	SAMPLE ID:	1	MW-1	1	MW-2	 	MW-3 *	. <u></u> .	MW - 4	1	MW - 5		FIELD BLAN	= -
- 1	DATE SAMPLED:	1	9/21/89	ì	9/21/89	i	9/22/89	i	9/21/89	- ;	9/21/89	,		١.
=	222,000,000,000,000,000,000,000	40 0	=======					·			7121109	ı	9/21/89	ļ
-1	Antimony	1	ND	ĺ	ND	ı	ND	ı	ND	1	ND ND	:==: 1	ND The state of th	*
ı	Arsenic	ı	ND	j	ND	i	0.021	i	ND	i	ND	1	ND	•
I	Beryllium	1	ND	i	ND	i	ND	i	ND	-	ND	,	ND	!
I	Cadmium	1	ND	i	ND	i	ND	i	ND	1	ND	!	UND CHN	!
1	Chromium	ı	ND	i	ND	i	ND	i	ND	:	ND	!		!
ı	Copper	i	ND	i	ND	i	ND	;	ND	1	ND	!	ND	ı
1	Lead	i	ND	i	ND	i	ND	ı	ND	!		!	ND	ı
1	Mercury	i	ND	i	ND	;	ND	1	ND	í	ND	ı	ND	I
1	Nickel	i	ND	i	ND	;	ND	!	ND		ND	ı	ND	I
ļ	Selenium	i	ND	i	ND		ND	!		!	ND	1	ND	ı
ı	Silver	i	ND	1	ND	1	ND	!	ND	!	ND	1	ND	ı
i	Thallium	ï	ND CIN		ND	!	ND	1	ND	!	ND	1	ND	1
i	Zinc		0.91	!	0.08	!		!	ND	1	ND	I	ND	ĺ
i	Cyanide, Total	!	ND	!		!	0.02	!	0.02	i	0.16	ı	ND	ł
-	Phenolics, Total	1		!	ND	1	ND	ı	ND	l	ND	1	ND	ı
		ł	0.44	ı	ND	ı	0.04	ı	ND	ł	ND	1	ND	ı
			*********		:========	===:		ه جا کا	========	====				

NOTES: * - No field blank collected; sample collected with dedicated gas displacement sampler.

ND - Not detected.

Units are mg/l.

TABLE 19-A: PRIORITY POLLUTANT METALS AND INORGANICS - FIRST ROUND GROUNDWATER RESULTS LE CARPENTER, WHARTON, NEW JERSEY

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	2275	******			===		1885	-	1885						
SAMPLE ID:	- 1	MW-8	i	MW-11d	ı	MW-111	1	MW-121	ı	MW-12s				FIELD BLANK	
DATE SAMPLED:	I	9/20/89	1	9/20/89	1	9/20/89	ı	9/20/89	ŀ	9/21/89	į	9/20/89	i	9/21/89	i
		2002222E	823	********			222		:225		221		==:		_
Antimony	- 1	ND	1	ND	ı	ND	ı	ND	1	0.54	ı	ND	ı	ND	. <u> </u>
Arsenic	-	0.005	1	ND	1	ND	1	ND	1	0.008	Ĺ	ND	i	ND	i
Beryllium	1	ND	-	ND	1	ND	ı	ND	ı	ND	i	ND	1	ND	i
Cadmium	- 1	ND	ı	ND	1	ND	1	ND	i	ND	i	ND	i	ND	;
Chromium	1	ND	J	ND	ı	ND	1	ND	i	ND	1	ND	i	ND	!
Copper	1	ND	ı	ND	ſ	ND	i	ND	i	ND	i	ND	ï	ND	1
Lead	1	ND	1	ND	i	ND	i	ND	i	ND	i	ND	!	ND	1
Mercury	1	ND	ı	ND	i	ND	i	ND	i	ND	ï	ND	!	ND	!
Nickel	1	ND	i	ND	i	0.04	i	ND	i	0.09	;	ND	!	ND	!
Selenium	1	ND	i	ND	i	ND	i	ND	÷	0.015	;	ND	1	ND	!
Silver	i	ND	i	ND	i	ND	i	ND	;	ND	:	ND			!
Thallium	1	ND	i	ND	i	ND	i	ND	;	ND	!	ND ND	!	ND	!
I Zinc	·	0.41	:	0.1	:						ı	NU	1	ND	ı
•	ı		ı		1	0.02	1	0.19	1	0.15	1	0.25	Į	ND	í
Cyanide, Total	1	ND	1	ND	1	ND	1	ND	1	ND	1	ND	ı	ND	i
Phenolics, Total	1	ND	1	ND	1	0.05	1	ND	ı	0.03	i	ND	i	ND	i
220555555555555555	****		*==					*********					•		•

NOTES:

Units are mg/l.

ND - Not detected.

TABLE 19-A: PRIORITY POLLUTANTS METALS AND INORGANICS - FIRST ROUND GROUNDWATER RESULTS
LE CARPENTER, WHARTON, NEW JERSEY

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		28022528	*********	*******	22#28###		*******	*******		20222222	82
1	1	ı	1	ı	1	1	i	i Field	d Field	d Field	1
SAMPLE ID:	MW-13	1 MW-13:	s MW-140	d MW-14	1 MW-14	s IMW-15	i MW-15s	Blani	•	•	i
DATE SAMPLED:										89 10/24/6	201
250505000000000000000000000000000000000									-	-	•
Antimony	I ND	I ND	I ND	I ND	I ND	I ND	l ND	I ND	i ND	ON 1	= }
Arsenic	I ND	I ND	I ND	I ND	I ND	I ND	I ND	I ND	I ND	I ND	!
Beryllium	I ND	I ND	I ND	I ND	I ND	I ND	I ND	I ND	1 ND	I ND	!
[Cadmium	I ND	I ND	I ND	I ND	i ND	I ND	I ND	I ND	ם און	,	!
Chromium	1 0.02	I ND	I ND	I ND	ם או	i ND	1 ND	I ND		I ND	ļ
Copper	I ND	1 0.17	1 0.02	1 0.02	I ND	J ND	I ND		I ND	I ND	!
Lead	I ND	I ND	1 0.007	i ND	I ND	,		ND	I ND	I ND	ı
Mercury	I ND	J ND				ND	I ND	ND	I ND	ND	1
Nickel	,	1	I ND	į ND	I ND	ND	ND	ND	I ND	I ND	1
,	I ND	0.14	j ND	i ND	ND	ND	I ND	ND) ND	ND	1
Selenium	I ND	I ND	I ND	I ND	I ND	ND	, ND	J ND	1 ND) ND	ı
Silver	I ND	ND	I ND	I ND	J ND	ND	ND	ND	j ND	ND	ı
Thallium	J ND	ND	I ND	I ND	ND	ND	ND	I ND	I ND	, ND	i
Zinc	1 0.01	0.06	0.08	0.38	0.03	0.04	0.05	0.07	1 0.01	1 0.07	i
Cyanide, Total	I ND	ND	ND	I ND	I ND	I ND	I ND	I ND	1 ND	l ND	i
Phenolics, Tota	1 ND	ND	ND	ND	ND	, ND	I ND	I ND	I ND	ם או	i
*************	2000000									, ,,,,,,	•

NOTES:

Units are mg/l.
ND - Not detected.

TABLE 19-A: PRIORITY POLLUTANT METALS AND INORGANICS - FIRST ROUND GROUNDWATER RESULTS
LE CARPENTER, WHARTON, NEW JERSEY

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2	######################################	***	*********	=00	******			.age			*******			
ı	SAMPLE ID:	ł	MW-161	1	MW-16s	ı	MW-17d	1	MW-17s				FIELD BLANK	•
ı	DATE SAMPLED:	1	9/20/89	1	9/20/89	1	9/14/89	i	9/14/89	i	9/14/89	i	9/20/89	, 1
=	8022786###################################	186	2044020ag	920		440	******			•				,
I	Antimony	1	ND	ı	ND	ı	ND	1	ND	1	ND ND	1	ND ON	,
- 1	Arsenic	ı	ND	ı	0.007	i	ND	i	ND	i	ND	ï	ND I	,
١	Beryllium	ı	ND	Ī	ND	i	ND	i	ND	i	ND	;	ND i	,
ı	Cadmium	ı	ND	i	ND	i	ND	i	ND	i	ND	ï	ND i	
- 1	Chromium	ı	ND	ı	ND	i	0.01	i	ND	i	ND	ï	ND I	
ı	Copper	1	ND	ı	ND	i	ND	i	ND	i	ND	¦	ן פא	
1	Lead	ı	NO	i	ND	i	ND	i	ND	i	ND	ï	I GN	
1	Mercury	ı	ND	į	ND	i	ND	i	ND	i	ND	ï	ן כא	,
1	Nickel	ı	ND	ı	ND	Ì	ND	i	ND	i	ND	ï	ND (
ı	Selenium	١	ND	1	ND	i	ND	i	ND	i	ND	:	ND I	
- 1	Silver	ı	ND	i	ND	i	ND	i	ND	i	ND	:	I DN	
-1	Thallium	ı	ND	Ì	ND	i	ND	i	ND	;	ND ·	:	ND I	
ı	Zinc	ı	0.05	i	0.01	i	0.02	i	0.02	i	0.07	1	0.25	
1	Cyanide, Total	ı	ND	i	ND	i	ND	i	ND	1	ND	•	ND I	
-	Phenolics, Total	i	ND	i	ND	i	ND	i	ND	!	ND		ו מא	
=		-				•						I		
			,	-						-45	********	==		

NOTES:

Units are mg/l.
ND - Not detected.

TABLE 19-A: PRIORITY POLLUTANT METALS AND INORGANICS - FIRST ROUND GROUNDWATER RESULTS
LE CARPENTER, WHARTON, NEW JERSEY

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***************		*******				*******		********					2 2
1	١		1		ı		ı	Production	1	Field	ı	Field	1
SAMPLE ID:	-1	MW-18d	1	MW-18i	ı	MW-18s	ı	Well	Ì	Blank	i	Blank	i
DATE SAMPLED:	١	9/15/89	1	9/15/89	1	9/15/89	١	10/24/89	i	9/15/89	i	10/24/89	i
2224056045225500000000000000000000000000			-	*********	we:	:0400000	72	2222222222		********			-
Antimony	1	ND	١	ND	ı	ND	ı	ND	ı	ND	ı	ND	1
Arsenic	-1	ND	1	ND	1	ND	1	ND	Ĺ	ND	i	ND	i
Beryllium	1	ND	1	ND	1	ND	ĺ	ND	Ĺ	ND	i	ND	i
Cadmium	1	ND	ı	ND	1	ND	1	ND	i	ND	i	ND	i
Chromium	-1	ND	ŧ	ND	1	ND	i	ND	i	ND	i	ND	i
Copper	1	0.01	١	ND	1	ND	i	ND	i	ND	i	ND	ì
Lead	ı	ND	ı	ND	i	ND	i	ND	i	ND	i	ND	;
Mercury	1	ND	İ	ND	ì	ND	i	ND	i	ND	i	ND	i
Nickel	1	ND	1	0.79	i	0.04	i	ND	i	NÓ	i	ND	i
Selenium	1	ND	ī	ND	i	ND	i	ND	i	ND	i	ND	i
Silver	1	ND	Ì	ND	i	ND	i	ND ·	i	ND	i	ND	i
Thallium	ı	- ND	Ĺ	ND	i	ND	i	ND	i	ND	i	ND	¦
Zinc	i	0.35	i	0.44	i	0.12	i	0.22	i	0.01	i	0.07	1
Cyanide, Total	i	ND	i	ND	i	ND	i	ND	i	ND	1	ND	1
Phenolics, Total	i	ND	i	ND	i	ND	i	26.9	i	ND	1	ND	!
									•		1	NU	i

NOTES:

Units are mg/1.

ND - Not detected.

TABLE 19B

PRIORITY POLLUTANTS METALS AND OTHER INORGANICS - SECOND ROUND GROUNDWATER RESULTS

TABLE 19-B: PRIORITY POLLUTANT METALS AND INORGANICS - SECOND ROUND GROUNDWATER RESULTS L.E. CARPENTER, WHARTON, NEW JERSEY.

Page 1 of 5 FIELD FIELD SAMPLE ID: MW-1 MW-2 MW-3 MW-4 MW - 5 MW-6 MW-7 BLANK **BLANK** DATE SAMPLED: 1/25/90 1/24/90 1/24/90 1/24/90 1/25/90 1/25/90 1/25/90 1/24/90 1/25/90 **Antimony** ND ND ND 32.3 J ND 54.9 J ND ND Arsenic ND ND 7.2 J 3.1 J ND 3.3 J 31.7 ND ND Beryllium ND ND ND ND ND ND ND ND ND Cadmium ND ND ND ND ND ND ND ND ND Chromium ND ND ND ND ND ND ND ND ND Copper ND ND ND ND ND ND 26.1 ND ND Lead ND ND ND ND ND ND 8.3 S ND Mercury ND ND ND ND ND ND ND ND ND ND Nickel ND ND ND ND ND ND ND ND ND Selenium ND ND ND ND ND ND ND ND ND ND Silver ND ND ND ND ND ND ND ND Thallium ND ND ND ND ND ND ND ND ND Zinc ND 60.1 ND 289 ND 56.4 224 ND ND Cyanide ND ND ND ND В ND ND ND ND Phenolics ND ND 310 ND ND 620 15 ND ND

NOTES: All units are ug/L

J - Below certified detection limit but above method detection limit. S - Value determined by method of standard additions.

TABLE 19-B: PRIORITY POLLUTANT METALS AND INORGANICS - SECOND ROUND GROUNDWATER RESULTS L.E. CARPENTER, WHARTON, NEW JERSEY.

	========		*********		******	8==8=====		Page 2 c	of 5
SAMPLE ID: DATE SAMPLED:	MW-8 1/25/90	MW-9 1/24/90	MW-9DU 1/24/90	P MW-10 1/24/90	MW-11d 1/25/90	MW-11i 1/25/90	MW-11iDUP 1/25/90	FIELD BLANK 1/24/90	FIELD BLANK 1/25/9
Antimony Arsenic	ND	ND	32.3 J	33.5 J	ND	ND	NO ON	ND ND	HD ND
Beryllium	8.1	ND .	ND	21.3	ND	ND	ND	ND	ND
Cadmium	ND ND	ND	ND	ND	ND	ND	ND	ND	ND
Chromium		ND	ND	ND	ND	ND	ND	ND	ND
	ND	ND	ND	ND	ND	מא	ND	ND	ND
copper	ND	ND	ND	ND	ND	ND	7.9 J	ND	ND
.ead	ND	ND	ND	ŅD	ND.	ND	ND	ND	ND
ercury	ND	ND.	ND	ND	ND	ND	ND	ND	ND
lickel	ND	ND	ND	ND	ND	19.1 J	26 J	ND	ND
Selenium	ND	ND	ND	ND	ND	ND	ND .	ND	ND
ilver	ND	ND	ND	ND	ND	ND	ND .	ND	
hallium	ND	ND	ND	ND	ND	ND	ND	ND	ND
inc	43.4	ND	ND	46.3	ND	12.9 J	13.6 J		ND
:yanide	ND	ND	ND	ND	ND	ND ND	ND ND	ND	ND
henolics	ND	ND	ND	350	ND	ND ND		ND	ND
		362888888 <u>8</u>					15 =========	ND	ND

NOTES: All units are ug/L J - Below certified detection limit but above method detection limit.

TABLE 19-B: PRIORITY POLLUTANT METALS AND INORGANICS - SECOND ROUND GROUNDWATER RESULTS L.E. CARPENTER, WHARTON, NEW JERSEY.

	=======			0=90=5222				Page	3 of 5
SAMPLE ID: DATE SAMPLED:	MW-121 1/26/90	MW-12s 1/26/90	MW-13i 1/23/90	MW-13s 1/23/90	MW-14d 1/23/90	MW-141 1/23/90	MW-14s 1/23/90	1/23/90	FIELD BLANK 1/26/90
Antimony Arsenic Beryllium Cadmium Chromium Copper Lead Mercury Nickel Selenium Silver Thallium Zinc Cyanide Phenolics	ND ND ND ND ND ND ND ND ND ND ND	75.0 8.8 J ND ND ND ND ND ND ND ND ND ND ND ND ND	ND ND ND 94.5 7.4 J ND ND ND 2.3 J ND ND ND ND	ND ND ND ND ND 66.7 ND 77.1 2.0 J ND ND 36.4 ND	ND ND ND ND ND ND ND ND ND ND ND ND ND N	ND ND ND ND 10.2 J ND ND ND ND ND ND ND ND ND ND ND ND	ND ND ND ND ND ND ND ND ND ND ND ND	**************************************	ND ND ND ND ND ND ND ND ND ND ND ND ND N

NOTES: All units are ug/L J - Below certified detection limit but above method detection limit.

TABLE 19-B: PRIORITY POLLUTANT METALS AND INORGANICS - SECOND ROUND GROUNDWATER RESULTS L.E. CARPENTER, WHARTON, NEW JERSEY.

200500000000	*======			500001000			Page 4 c	of 5
SAMPLE ID: DATE SAMPLED:	MW-15i 1/23/90	MW-15s 1/23/90	MW-16s 1/22/90		MW-17d 1/23/90	MW-17s 1/23/90	1/22/90	FIELD BLANK 1/23/90
Antimony	ND	ND	ND	ND	ND	ND	ND	ND ND
Arsenic	ND	ND	ND	6.7 J	ND	ND	ND	ND
Beryllium	ND	ND	ND	ND	ND	ND	ND	ND
Cadmium	ND	ND	ND	ND	ND	ND	ND	ND
Chromium	ND	ND	ND	ND	15.4	ND	ND	ND
Copper	ND	ND	8.1 J	7.3 J	5.3 J	ND	ND	ND
Lead	ND	ND	ND	ND	ND	ND	ND	ND
Mercury	ND	ND	ND	ND	ND	ND	ND	ND
Nickel	ND	ND	ND	81.3	ND	ND	ND	ND
Selenium	ND	ND	ND	2.5 J	ND	ND	ND	ND
Silver	ND	ND	ND	ND	ND	ND	ND	ND
Thallium	ND	ND	ND	ND	ND	ND	ND	ND
Zinc	ND	ND	15.6 J	42.6	ND	ND	ND	ND ND
Cyanide	ND	ND	ND	ND	ND	ND	ND	ND D
Phenolics	ND	ND	ND	ND	ND	NID	ND	ND
2322222222222		========		242248882				NU

NOTES: All units are ug/L J - Below certified detection limit but above method detection limit.

TABLE 19-B: PRIORITY POLLUTANT METALS AND INORGANICS - SECOND ROUND GROUNDWATER RESULTS
L.E. CARPENTER, WHARTON, NEW JERSEY.

			-		•		
55555555555555555555555555555555555555						Page 5 o	f 5
SAMPLE ID: DATE SAMPLED:	MW-18d 1/22/90	MW-181 1/22/90	MW-18s 1/22/90	PRO-WELL 1/25/90	FIELD BLANK 1/22/90	FIELD BLANK 1/25/90	
Antimony Arsenic Beryllium Cadmium Chromium Copper Lead Mercury Nickel Selenium Silver Thallium Zinc Cyanide Phenolics	ND ND ND ND T.3 J ND ND ND ND ND ND ND ND ND	ND ND ND 8.6 J ND ND 1250 ND ND ND 17.3 J ND	ND ND ND ND 7.3 J ND ND ND ND ND ND ND ND ND	ND ND ND ND ND 33,3 ND ND ND ND ND ND ND ND ND	ND ND ND ND S.9 J ND ND 2 J ND ND 11.8 J ND	ND ND ND ND ND ND ND ND ND ND ND ND ND N	
==========			35555555				

NOTES: All units are ug/L J - Below certified detection limit but above method detection limit.

TABLE 20

ORGANOCHLORINE PESTICIDES/PCBS TESTING - GROUNDWATER RESULTS - FIRST AND SECOND ROUNDS

TABLE 20: ORGANOCHLORINE PESTICIDES/PCB's TESTING - GROUNDWATER RESULTS

Page 1 of 1

FIRST AND SECOND ROUNDS

EPA METHOD 8080

LE CARPENTER, WHARTON N.J.

	FIRST ROUND	SECOND ROUND
	SEPTEMBER/OCTOBER 1989	JANUARY 1990
		!
Groundwater		##2:::::::::::::::::::::::::::::::::::
Sample #		
Squibte &	<u> </u>	
MW-1	ND	, ND
MW-2	ND	ND
MW-3	ND I	ND ND
MW - 4	ND	, ND
MW-5	Į ND	ND
MW - 6	not sampled	I ND
MW-7	not sampled	ND
MW - 8	I ND	ND
MW-9	not sampled	מא
MW-10	not sampled	ND
MW-11s	not sampled	not sampled
MW-111	I ND [ND ND
MW-11d	I ND [ND ND
MW-12s	ND	ND ND
MW-121	ND [ND ND
MW-13s	l ND	ND ND
MW-131	l div	ND
MW-14s	l ND i	ND
MW-141	ND (ND
MW-14d	I ND [ND
MW-15s	l ND [ND
MW-151	I ND	ND
MW-16s	ND I	ND
MW-161	ND (ND
MW-17s	ND [not sampled
MW-17d	l ND [ND
MW-18s	l ND [ND
MW-181	I ND [ND
MW-18d	I ND I	ND

NOTES: ND - No organochlorine pesticides/PCB's detected for the indicated sample.

TABLE 21

SUMMARY OF VOLATILE ORGANIC ANALYTICAL TESTING - SURFACE WATER RESULTS

TABLE 21: SUMMARY OF VOLATILE ORGANICS ANALYTICAL TESTING - SURFACE WATER RESULTS BY EPA METHOD 624 + 15

L.E. CARPENTER, WHARTON, NEW JERSEY.

Page 1 of 1

	3/14/89	3/14/89	3/14/89	3/14/89	8/2/89	SW-6 # 3/14/89	3/14/89	8/2/89	3/14/89	8/2/89
PARAMETER]		1	i I		 	 	 	 	1
(ug/1)	Ì	İ	ĺ	l i		ĺ	İ	İ	İ	i i
Chloromethane	ND	ND	ND	ND	ND	į ND	ND	ND	į ND	ND I
Bromomethane	ND	ND	ND :	ND j	ND	ND	į ND	į ND	i ND	j ND j
Vinyl chloride	ND	ND	ND	ND j	ND	j ND	j ND	j ND	ND	j ND j
Chloroethane	ND	ND	ND :	ND i	ND	į ND	i ND	j ND	ND	i ND i
Methylene chloride	1.0 J	ND	j ND	ND j	3.8 Jp	j 3.8 J	[2.0 Jp	j2.7 Jp	j6.2 Jp	5.9 Jp
1,1-Dichloroethene	ND	ND	į ND '	ND i	ND .	į ND	į ND į	ND	ND	j ND j
1,1-Dichloroethane	ND	ND	ND :	ND j	ND	ND	j ND	j ND	ND	ן מאן
1,2-Dichloroethene (total)	ND	ND	j ND i	I ND I	ND	ND	ND	ND	ND	I ND I
Chloroform	ND	ND	ND	ND j	ND	ND	ND	j ND	ND	I ND I
1,2-Dichloroethane	ON D	ND D	į ND	ND j	ND	ND	ND	į ND	ND	ן מא ן
1,1,1-Trichloroethane	ND	ND	j ND	i ND i	3.7 J	j ND	į ND	j ND	ND	j ND j
Carbon tetrachloride	ND	j ND	j ND	ND i	ND	į ND	į ND	j ND	ND	j ND j
Bromodichloromethane	ND	ND	j ND	ND j	ND .	į ND	į ND	j ND	ND	j ND j
1,2-Dichloropropane	į ND -	į ND	j ND	j ND j	ND	i ND	ND	ND	ND	j ND j
trans-1,3-Dichloropropene	ND	į ND	į ND	ND i	ND	j ND	ND ND	I ND	ND	I ND I
Trichloroethene	ND	I ND	ND	I ND I	ND	ND ND	ND	ND ND	ND	ND I
Dibromochloromethane	j ND	ND	ND	į ND į	ND	ND ND	į ND	ND	į ND	i ND i
1,1,2-Trichloroethane	į ND	ND	ND	Í ND Í	ND	ND	į ND	ND	į ND	į DN į
Benzene	į ND	i ND	j ND	į ND į	ND	į ND	i ND	j ND	į ND	i ND i
cis-1,3-Dichloropropene	į ND	ND	ND	j ND j	ND	i ND	j ND	j ND	j ND	i ND i
2-Chloroethyl vinyl ether	j ND	ND	ND	ND i	ND	I ND	j ND	j ND	į ND	j ND j
Bromoform	j ND	į ND	j ND	j ND j	ND	ND	j ND	j ND	į ND	j nd j
1,1,2,2-Tetrachloroethane	į ND	ND	ND	Í ND Í	ND	I ND	j ND	į NĐ	j ND	j nd j
Tetrachloroethene	j ND	j ND	j N D	j ND j	ND	j N D	j ND	j ND	j ND	į ND į
Toluene	I ND	ND	ND	j ND j	ND	ND	j ND	j ND	į ND	j ND j
Chlorobenzene	ND ND	j ND	ND	j ND j	ND	1.2 J	j ND	j ND	į NĐ	j ND j
Ethylbenzene	j ND	[ND	Į ND	I ND I	3.5 J	םא ן	I ND	J ND	į ND	I ND I
Xylenes (total) @	ND	i MD	ND	i nd i	44	ND	i nd	i ND	I ND	i nd i
TOTAL TARGETED VOC ***	1.0 #	ND#	ND #	ND #	51.2 #	5.0 #	ND	ND	ND I	ND
NON-TARGETED VOC	į	İ	į	į		į	į	į	į	<u> </u>
Acetone	i ND	I ND	j I ND	I ND I	ND	l ND	I ND	i ND	i ND	5.4
	I ND	I ND	I ND	ן אט ן ו מא ו	I ND	ND 13	ם ND	ם או מאו	ם או מאו	3.4 ND
Total Unknown compounds	ן ו אט	ן ו איט	ן ו אט	ן עוא ן	שא	12	i wn	ייא ן 	ן עשון	ן אט ן
TOTAL NON-TARGETED VOC	ND #	ND #	ND #	ND#	ND #	13 #	ND	ND	ND	5.4

NOTES: J - Detected below reporting limit or is an estimated concentration.
p - Compound also detected in laboratory method blank.
- NJDEP Tier I sample holding time was exceeded.
② - Xylene was analyzed by the laboratory as a non-targeted compound. Xylene is listed and totaled as a targeted compound because it is a compound of concern at this site.

ND - Not detected.

*** - Total excludes compounds detected in laboratory method blank, (p), includes compounds detected at trace concentrations (J).

TABLE 22

SUMMARY OF VOLATILE ORGANIC ANALYTICAL TESTING - STREAM SEDIMENT RESULTS

TABLE 22: SUMMARY OF VOLATILE ORGANICS ANALYTICAL TESTING - STREAM SEDIMENT RESULTS BY EPA METHOD 8240 + 15

L.E. CARPENTER, WHARTON, NEW JERSEY.

Page 1 of 1

								• FIELD •		TRIP *
SAMPLE ID:	SS-1	SS-2	SS-3	SS-4		SS-6	BLANK	BLANK	BLANK	BLANK
DATE SAMPLED:		03/14/89						08/2/89	[03/14/89	08/2/89
SAMPLE DEPTH (feet):	•	.5 - 1.0			• -			•	-	•
PARAMETER	ı				<u> </u>		 	1	!	
(ug/kg)	I	1		ŀ	l .	ĺ	l	Ì	1]
Chloromethane	I ND	ND	j ND	ND ND	j nd	j ND	ND	ND	I ND	ND
Bromomethane	j ND	j ND j	I ND	ND ND	j ND	j ND	ND	j ND	j ND	ND
Vinyl chloride	I ND	ND]	ND	ND	ND I	ND	ND	j ND	I ND	ND
Chloroethane	j ND	ND I	ND	ND	j ND	ND	ND	! ND	ND	ND
Methylene chloride	į ND	j 59 J	39 JB	43 JB	29 J	24 JB	5.9 Jp	2.7 Jp	6.2 Jp	ND
1,1-Dichloroethene	j ND	j ND	ND	ND	ND	j ND	ND	ND	ND I	ND
1,1-Dichloroethane	j ND	j ND j	ND	i ND	ND	ND ND	ND	j ND	ND	ND
1,2-Dichloroethene (total)	į ND	I ND I	ND ND	ND	j ND	I ND	ND I	ND	ND I	ND
Chloroform	ND	j ND	j ND	ND	ND	j ND	ND	ND	I ND	ND
1,2-Dichloroethane	I ND	ND	ND	ND	ND ND	I ND	ND	ND	ND	ND
1,1,1-Trichloroethane	ND	ND	(CN	į ND	ND	I ND	j ND	ND	ND I	ND
Carbon tetrachloride	į NĎ	j ND	ND	ND	ND	j ND !	ND	ND	ND I	ND
Bromodichloromethane	I ND	ND.	ND	ND	I ND	ו לוא ן	ND	ND	j ND	ND
1,2-Dichloropropane	ND ND	į ND	ND	j ND	j ND	j ND	j ND	ND	ND I	ND
trans-1,3-Dichloropropene	I ND	I ND	ND	ND	ND	ND	ND ND	ND	ND	ND
Trichloroethene	ND ND	I ND	ND	j ND	j ND	I ND	ND	ND	ND ND	ND
Dibromochloromethane	i ND	ND:	ND	ND ND	j ND	i ND	' ND	ND	ND	ND
1,1,2-Trichloroethane	i ND	ÍND	DN	j ND	i ND	i ND	ND	ND	i ND	ND
Benzen e	ND	j ND	. ND	j ND	ND	j ND	ND ND	ŇD	i ND	ND
cis-1,3-Dichloropropene	ND ND	j ND:	ND	i ND	i ND	i ND	ND	ND .	ND I	ND
2-Chloroethyl vinyl ether	j ND	ND ND	. ND	j ND	j ND	j ND	ND	ND .	ND I	ND
Bromoform	j ND	ND	ND	ND ND	ND :	j ND i	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	j ND	j nd	ND	ND ND	j ND	j ND	ND	ND	ND I	ND
Tetrachloroethene	ND	ND	ND I	ND	ND	ND i	ND	ND	ND	ND
Toluene	3.3 J	l ND	ND	ND	ND .	j ND	ND	ND	ND	ND
Chlorobenzene	ND ND	į ND	ND	i ND	j ND '	25	ND	ND	ND	ND
Ethylbenzene	ND	ND	ND ND	ND	17	ND I	ND	ND	ND	ND
Total Xylenes (total) @	į ND	į ND	ND	ND	220	ND	ND	ND	ND	ND
TOTAL TARGETED VOC ***	3.3	59	39	43	266	49	ND	ND	ND	ND
1.1.2-Trichloro-	1			!						
2.2.1-trifluoroethane	i ND	ND.	30	ND	ND	20	ND	ND	ND	ND
Total Acetone	ND	I ND	ND	I ND	I ND	L ND	5.4	ND ND	ND ND	ND
Total Unknown compounds	680	I ND	ND	I ND	I ND	ND	ND	ND	ND ND	ND
TOTAL OTTOTTO COMPOUNDS] 170	טא ן 	ן אט 	ן מט 	ן אט	טא ן	עא	NU	NU
TOTAL NON-TARGETED VOC	680	ND I	30	ND I	ND	20	5.4	ND	ND	ND

- NOTES: J Detected below reporting limit or is an estimated concentration.
 p Compound also detected in laboratory method blank.
 B Compound also detected in laboratory method blank and sample concentration is at least 5 times
 - the laboratory method blank concentration.

 Xylene was analyzed by the laboratory as a non-targeted compound. Xylene is listed and totaled here as a targeted compound because it is a compound of concern at this site.
 - ND Not detected.

 - ** Analyzed by EPA Method 624 reported in ug/l.

 *** Excludes compounds detected in laboratory method blank (p), includes compounds detected at trace concentrations (J) and (B).



SUMMARY OF BASE/NEUTRAL ANALYTICAL TESTING - SURFACE WATER RESULTS

1027WG.FM

TABLE 23: SUMMARY OF BASE/NEUTRAL ANALYTICAL TESTING - SURFACE WATER RESULTS BY EPA METHOD 625 + 15 L.E. CARPENTER, WHARTON, NEW JERSEY Page 1 of 1

L.E. CARPENTER, WHARTON							FIELD	FIELD
SAMPLE ID:	SW-1		SW-3	SW-4	SW-5	SW-6	BLANK	BLANK
DATE SAMPLED:						j03/14/89		
PARAMETER	i I	500505555 1	erosanes I	e de seu como I	2022020 1	öbenbarus: I	 	88988881
(ug/1)	ł	1	i	1	! 1	<u> </u>	!	[
bis(2-Chloroethyl)ether	i ND	מא	ND	I ND	I ND	ND I	I ND	I ND
1.3-Dichlorobenzene	ND	I ND	ND	ND	ND	I ND	ND	I ND
1,4-Dichlorobenzene	i ND	I ND	I ND	I ND	I ND	I ND	ND ND	ם און מאו
1,2-Dichlorobenzene	ND	I ND	I ND	I ND	I ND	I ND	ם או	I ND
bis(2-Chloroisopropyl)ether	ND	i ND	ND	ם או	ם או מא	I ND	I ND	I ND
N-Nitroso-di-n-propylamine	i ND	I ND	ND	מא	ND	ND :	ND	I ND
Hexachloroethene	I ND	I ND	ND	i ND	I ND	I ND	םא ו	I ND
Nitrobenzene	i ND	ND	ND	i ND	ND	i ND	I ND	I ND
Isophorone	i ND	I ND	I ND	i ND	ND	i ND	I ND	ND
bis(2-Chloroethoxy)methane	ND ND	I ND	ND	ND ND	ND	I ND	I ND	I ND
1,2,4-Trichlorobenzene	i ND	I ND	ND	ND	ND	I ND	I ND	I ND
Naphthalene	ND	I ND	I ND	ND	ND	I ND	מא	ND I
Hexachlorobutadiene	ND	I ND	ND ND	I ND	ND	ND	ND	I ND
Hexachlorocyclopentadiene	ND	ND	I ND	I ND	ND	ND I	CN I	ND
2-Chloronapthalene	ND	ND :	ND ND	I ND	מא	ND	ND	ND
Dimethyl phthalate	i ND	ND	ND	i ND	ם מא	ND I	ND	ND
Acenaphthylene	ND	ND	ND	I ND	ND	ND I	ND	I ND
Acenaphthene	i ND	ND	ON I	I ND	ND	ND	ND	I ND
2,4-Dinitrotoluene	ND.	מא	ND	ND I	ND	ND	ND	I ND
2.6-Dinitrotoluene	i ND	ND	ND	I ND	ND	ם או	ND	מא
Diethyl phthalate	i ND	ND	ND ND	ND I	ND	מא	ND	ם או
4-Chlorophenyl phenyl ether	i ND	ND	ND	I ND	ND	ND	I ND	I ND
Fluorene	i ND	ND	ND	i ND	ND '	ND I	ND I	I ND
N-Nitrosodiphenylamine	i ND	ND	ND	ND I	ND	ND I	ND I	I ND
4-Bromophenyl phenyl ether	i ND	ND	ND	ND	ND	מא	ND	ND
Hexachlorobenzene	i ND	ND ND	ND	ND	ND	ND I	ND	מא
Phenanthrene	i ND	I ND	ND	ND I	ND	ND I	ND	ND
Anthracene	i ND	I ND	ND	ND I	ND	ND I	ND	ND
Di-n-butyl phthalate	j 3.2 p	i 3.7 p	3.6 p	3.5 p	ND	4.0 p	3.4 p	ND
Fluoranthene	i ND	I ND	ND.	ND	ND	ND	ND	ND
Pyrene	i ND	ND I	ND	ND I	ND	ND	ND	ND
Butyl benzyl phthalate	ND ND	ND :	ND	ND	ND	ND	ND	ND
3,3'-Dichlorobenzidine	i ND	I ND	ND	ND i	ND	ND i	ND	ND
Benzo(a)anthracene	j ND	j ND i	ND	i ND Ì	ND	ND	ND	ND
bis(2-Ethylhexyl)phthalate	j ND	į ND į	ND	7.2 J	ND	ND	ND	ND
Chrysene	j ND	i ND i	ND ND	ND i	ND	ND	ND	ND
Di-n-octyl phthalate	j ND	j ND i	ND	ND i	ND	ND	ND	ND
Benzo(b)fluoranthene	j ND	ND i	ND	ND I	ND	ND I	ND	ND
Benzo(k)fluoranthene	i ND	I ND	ND	I ND I	ND	ND	ND	ND
Benzo(a)pyrene	i ND	ND	ND	ND I	ND	ND I	ND	ND
Indeno(1,2,3-c,d)pyrene	ND	ND I	ND	ND	ND	ND I	ND	ND
Dibenzo(a,h)anthracene	j ND	ND	ND	ND	ND	ND I	ND	ND
Benzo(g,h,i)perylene	i ND	i ad i	ND	ND	ND	ND I	ND i	ND
TOTAL TARGETED BASE NEUTRALS ***	ND	ND	ND	7.2	ND	ND	NDq	ND
Total Tetradecanoic Acid	ND ND	ND	ND	ND	ND I	 840	ND I	ND
Other compounds	j ND	ND	ND	ND	ND	68	ND	ND
Unknown compounds	j ND	ND	ND	ND	110	1005	ND	120
TOTAL NON-TARGETED BASE NEUTRALS	ND	ND	ND	ND	110	1913	ND	120

NOTES: J - Detected below reporting limit or is an estimated concentration.
p - Detected at 3 times less than the value in the method blank. Result negated as per NJDEP QAS directive.
q - Surrogate recovery was outside standard QC limits.
ND - Not detected.
*** - Excludes compounds detected in laboratory method blank (p); includes compounds detected at trace concentration:



SUMMARY OF BASE/NEUTRAL ANALYTICAL TESTING - STREAM SEDIMENT RESULTS

1027WG.FM 6/25/90

TABLE 24: SUMMARY OF BASE/NEUTRAL ANALYTICAL TESTING - STREAM SEDIMENT RESULTS BY EPA METHOD 8270 + 15 L.E. CARPENTER, WHARTON, NEW JERSEY.

Page 1 of 1

							FIELD **	FIELD **
SAMPLE ID:	SS-1	; SS-2	SS-3	SS-4	SS-5	SS-6	BLANK	BLANK
DATE SAMPLED:	03/14/89	03/14/89	5 - 1 0	03/14/89 .5 - 1.0		5 - 1.0	03/14/89	08/2/89
SAMPLE DEPTH (feet):	.5 - (.0		========	=======		=======		
PARAMETER		1	1					į
(ug/kg)		i	į				! !	
bis(2-Chloroethyl)ether	ND	ND	ND	ND	ND .	ND	ND	ND
1,3-Dichlorobenzene	ND	ND	ND	ND I	ND I	ND ND	ND ND	ND ND
1.4-Dichlorobenzene	ND ND	ND ND	ND ND	ND ND	ND ND	ND	ND	ND
1,2-Dichlorobenzene bis(2-Chloroisopropyl)ether	ND	ND	ND	ND	NĐ	ND	ND	СИ
N-Nitroso-di-n-propylamine	ND	ND	ND	ND	ND I	ND ND	ND ND	ND ND
Hexachioroethane	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND	ND
Nitrobenzene Isophorone	ND ND	. ND	ND	ND	ND	ND	ND	ND
bis(2-Chioroethoxy)methane	ND	ND	ND	ND	ND	ND	ND ND	ND ND
1,2,4-Trichlorobenzene	ND	ND 310 J	ND 690 J	ND ND	ND ND	ND ND	ND ND	ND I
Naphthalese Hexachlorobutadiese	200 J ND	ND	. ND	ND	ND	ND	ND	, ND
Hexachlorocyclopentadiene	ND	ND	ND	ND	ND	ND	ND ND	ND I
2-Chioronapthalene	ND	ND ND	ND ND	L ND	ND ND	ND ND	ND ND	ND ND
Dimethyl phthalate	ND ND	490 J	ND	. ND	ND	ND	ND	ND
Acenaphthylene Acenaphthene	ND	430 J	1300 J	ND	ND	ND	ND	ND
2,4-Dinitrotoluene	ND	ND	ND	ND	ND ND	ND ND	ND ND	ND ND
2.8-Dinitrotoluene	ND ND	ND ND	ND ND	ND ND	ND	ND ND	ND	ND
Diethyl phthalate 4-Chlorophenyl phenyl ether	. ND	ND	ND	ND	ND	ND	ND	ND
Fluorene	ND	810 J	1300 J	ND	ND ND	ND ND	ND ND	ND ND
N-Nitrosodiphenylamine	ND ND	ND ND	ND ND	ND ND	ND ND	ND	ND	ND
4-Bromophenyl phenyl ether Hexachlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND .
Phenanthrene	600 J	4900	10000	ND	1800 J	1000 J	ND	ND
Anthracene	140 J	1200 J ND	2800 J 2300 JB	ND 380 JB	490 J 380 J	ND 1800 JB	1 ND	ND ND
Di-n-butyl phthalate	: 680 J : 800 J	5200	14000	ND	4000	2800 J	ND	ND
Fluoranthene Pyrene	700 J	6100	11000	ND	3500	2800 J	ND	ND ND
Butyl benzyl phthaiate	ND	920 J	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND
3.3'-Dichtorobenzidine	ND 380 J	ND 3100	6400	ND	1600 J	1500 J	ND	ND
Benzo(a)anthracene bis(2-Ethylhexyl)phthalate	1100 J	55000	54000	22000	520000 B	74000	ND	ND
Chrysene	580 J	4300	8500	ND ND	2500 J : ND	1800 J . ND	ND ND	ND ND
Di-n-octyl phthalate	ND 540 JL	ND 6400 L	8200 L	ND ND	3800 L	2300 JL	ND	ND
Benzo(b)fluoranthene Benzo(k)fluoranthene	540 JL	6400 L	8200 L	ND	3800 L	2300 JL	ND:	ND
Benzo(a)pyrene	300 J	2900 J	4700	ND ND	1500 J 550 J	1200 J 950 J	ND ND	ND ND
Indeno(1,2,3-c,d)pyrene	ND ND	1500 J 430 J	2500 J	ND ND	ND 3	ND	, ND	ND
Dibenzo(a,h)anthracene Benzo(g,h,i)perylene	ND	1700 J	3300 J	ND	710 J	950 J	ND	ND
TOTAL TARGETED BASE NEUTRALS ***	6000	95490	130190	22380	540830	91100	ND	ND
		-	1	:			-	
NON-TARGETED BASE NEUTRALS Total Steroid compounds	ND	40200	ND	ND	ND	ND	ND	ND
Total Sulfur	2200	55000	9800	ND	ND	34000	ND	ND
Total Alkane compounds	3000	51000	ND	ND ND	197000	ND ND	ND	ND ND
Total Anthracene compounds	ND 8400	ND ND	4200 ND	ND ND	ND ND	ND ND	ND ND	ND
Total Methyl phenol Total Aldehyde compounds	ND	13000	, ND	ND	24000	ND	ND	, ND
Total Alkanoic acid	7200	ND	ND	ND	ND	ND	ND	ND
Total Other compounds	2200	7400	11000	ND ND	25000 134000	ND 79500	I ND	ND 120
Total Unknown compounds	21000	94000		1	1	į	100	
TOTAL NON-TARGETED BASE NEUTRALS	44000	260600	34900	ND	380000	113500	ND	120

NOTES: J — Detected below reporting limit or is an estimated concentration.

p - Compound also detected in laboratory method blank.

B - Compound also detected in the laboratory method blank, concentration in this sample is at least 5 times greater than concentrations found in laboratory method blank.

L - Compounds are not separable using this method and are therefore quantified together.

ND - Not detected.

B - The concentration of this compound in the method blank is between 3 and 5 times the CRDL. Based on NJDEP Tier 1 guidelines, this value is qualified and the cooresponding method blank is rejected.

** - Analyzed by EPA Method 625 and reported in ug/l.

- Excludes compounds detected in laboratory method blank (p), includes compounds detected at trace concentrations (J) and (B) Also includes one of the two compounds that have been quantified together (L).



SUMMARY OF PRIORITY POLLUTANT METALS TESTING - SURFACE WATER RESULTS

TABLE 25: SUMMARY OF PRIORITY POLLUTANT METALS TESTING - SURFACE WATER RESULTS L.E. CARPERTER, WHARTON, NEW JERSEY.

Page 1 of 1

					•								ŀ	FIELD	ı	FIELD	ı
SAMPLE ID:	1	SW-1	ı	SV-2	ı	SV-3	- 1	SV-4	١	SW-5	1	5 V -6	1	Blank	1	BLANK	ł
DATE SAMPLED:	i	03/14/89	1	03/14/89	1	03/14/89	- 1	03/14/89	ı	08/2/89	1	03/14/89	1	03/14/89	1	08/2/89	i
*******************	:= t	********	= =	******	= =	:::::::::::::::::::::::::::::::::::::::	=	========	= =	=======	= =		= =	2222222	= =	26222222	= {
PARAMETER	1		ı		1		ı		ı		1		1		ı		ı
(ug/1)	ı		ı		ı		1		1		١		1		ı		ı
•	ı		ı		1		1		1		١		1		1		1
Antimony	ı	ND	ı	RD	1	ND	ı	22.8 J	ı	ND	1	RD	ŀ	ND	1	ND	1
Arsenic	ı	RD	t	ND	ı	2.4 J	1	ND	1	10	ı	15.9	1	RD	1	HD	ı
Beryllium	1	ND	1	ND	1	ND	1	ND	1	HD	1	ND	İ	ND	1	ND	1
Cadaius	1	ND	1	RD	1	ND	ł	ND	ı	HD	1	22.2 J	ı	ND	١	ND	ı
Chronium	-	MD	1	RD	ı	8.0 J	1	ND	1	ND	İ	231	1	ND	1	ND	1
Copper	-	16.7 J	ı	5.3 J	ı	22.1 J	ı	6.7 J	1	ND	1	405	ı	ND	1	ND	1
Lead	ı	20.7	ı	ND	1	87.2	1	2.7 J	ı	6.0	1	1340	ı	ND	1	ND	1
Mercury	1	ND	ı	ND	1	ND	1	ND	1	ND	1	2.8	t	ND	1	ND	1
Nickel	1	HD	1	MD	ı	ND	ı	ND	1	ND	1	60.B J	ı	ND	1	ND	ı
Selenium	ı	ND	ı	ND	1	ND	1	ND	1	ND	1	7.1	i	ND	ı	ND	ı
Silver	- 1	ND	ı	ND	ı	ND	ı	ND	ı	ND	ı	ND	ı	ND	1	ND	ı
Thallium	ı	ND	ı	ND	1	ND	I	ND	1	ND	ı	ND	ŀ	ND	1	ND	ı
Zinc	ı	96.4	ı	4.2 J	ı	152	ł	23.0	1	60	ı	2370	l	ND	ı	RD	ı

NOTES: J - Detected below reporting limit.

ND - Not detected.



SUMMARY OF PRIORITY POLLUTANT METALS TESTING - STREAM SEDIMENT RESULTS

TABLE 26: SUMMARY OF PRIORITY POLLUTANT METALS TESTING - STREAM SEDIMENT RESULTS L.E. CARPENTER, WHARTON, NEW JERSEY.

Page 1 of 1

SAMPLE ID: DATE SAMPLED:		SS-1 03/14/89	1	SS-2 03/14/89	1	SS-3 03/14/89	1	SS-4 03/14/89	1	SS-5 08/2/89	1	SS-6 03/14/89	1	FIELD • BLANK 03/14/89	1	FIELD ** BLANK 08/2/89	•
SAMPLE DEPTH (feet):		.5 - 1.0	!	.5 - 1.0	!	.5 - 1.0	!	.5 - 1.0		0 - 1.0		.5 - 1.0		-		•	
	= =	*********	= =	::::::::::	=	========	=	=========	= =	:::::::::::::::::::::::::::::::::::::::	: =	=======================================	= :	*********	= ==	=======================================	=
PARAMETER	ı		1		ı		ı		1		ı		ı		1		1
(mg/kg)	1		ŀ		ł		ı		ı		ŧ		ı		ı		1
	1		-		ı		ı		1		ı		ı		1		1
Antimony	1	ND	1	ND	١	64.3	1	9.5 J	ı	RD	ı	ND	ı	ND	1	RD	ı
Arsenic	ı	4.9	ŧ	8.0	1	5.2	ı	5.6	ı	14	ŧ	25.7	ı	ND	ı	ND	ı
Beryllium	1	0.39 J	ı	ND	ı	0.35 J	1	0.65 J	ŧ	0.8	ı	0.39 J	1	ND	1	RD	ı
Cadmium	ı	ND	ı	5.0	1	ND	ı	1.5	ł	2.1	ı	3.0	ı	ND	ı	RD	1
Chronium	ı	9.9	1	33.7	ı	24.7	ı	25.1	ı	27	ı	34.7	1	RD	ı	ND	1
Copper	ı	30.4	1	87.5	ı	36.3	ı	27.6	ı	56	ı	69.0	ı	HD	1	ND.	ı
Lead	1	65.4	1	655	ı	199	ı	67.6	ł	156	ı	503	ı	ND	1	ND	1
Hercury	1	ND	1	2.5	ı	0.5	ı	0.3	1	11	ı	21	ı	ND	1	ND	1
Nickel	t	6.5 J	f	18.9 J	ı	17.1	ı	15.2	ı	19	ı	18.3	ı	ND	ı	ND	ı
Selenium	t	.70 J	1	0.93 J	ı	0.39 J	ı	ND	ı	ND	1	0.35 J	1	KD	1	ND	ì
Silver	ı	ND	١	ND	1	ND	1	ND	1	ND	ı	ND	ĺ	ND	i	ND	i
Thallium	ı	RD	ı	ND	1	ND	İ	ND	1	ND	1	ND	í	ND	i	ND	i
Zinc	i	46.3	ı	547	İ	228	ĺ	74.2	1	282	ı	336	ı	ND	İ	ND	i

NOTES: J - Detected below reporting limit. NA - Not analyzed.

ND - Not detected.

• - Reported in ug/l.

** - Reported in mg/l.

TABLE 27

SUMMARY OF POLYCHLORINATED BIPHENYLS (PCBS) TESTING - STREAM SEDIMENT AND SURFACE WATER RESULTS

TABLE 27: SUMMARY OF POLYCHLORINATED BIPHENYLS (PCBs) TESTING - STREAM SEDIMENT/ SURFACE WATER RESULTS EPA METHOD 608

L.E. CARPENTER, WHARTON, NEW JERSEY.

GeoEngineering, Inc. November 1989

Page 1 of 1

SAMPLE ID: DATE SAMPLED: SAMPLE DEPTH (feet):	1 5/ I	5 7-4 /9/89 -	 5 	SW FIELD BLANK /9/89	1 .5	S-4 + 5/9/89 5 - 1.0	ı	SS FIELD BLANK 5/9/89	1 1 1 1 1 1 1 1 1
PARAMETER	; 		!						1
(ug/1)] 		1		 		1		1
Aroclor-1016	İ	ND	İ	HD	i	ND	i	RD	i
Aroclor-1221	ı	ND	ı	ND	1	ND	1	ND	1
Aroclor-1232	t	HD	ı	RD	ı	ND	1	RD	1
Aroclor-1242	-	RD	ı	ND	ŀ	ND	1	ND	i
Aroclor-1248	l	ND	1	ND	1	ND	1	ND	1
Aroclor-1254	l	ND	1	ND	ŧ	ND	1	ND	ı
Aroclor-1260	ı	RD	1	ND	1	ND	ı	ND	ı

NOTES: ND - Not detected.

- - Not applicable.

* - Reported in ug/kg.

TABLE 28

SUMMARY OF VOLATILE ORGANICS ANALYTICAL TESTING - AIR SAMPLING RESULTS

TABLE 28: SUBMART OF VOLATILE ORGANICS ANALYTICAL TESTING - AIR SAMPLING RESULTS EPA METHOD 624

L.E. CARPENTER, WHARTON, NEW JERSET.

Geoing insering, Inc.
Hovenber 1989

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														6-		
SAMPLE ID:	ı		10-1-V	1	1	A	0-2- V A	ı	1	10-3- 7 1		1		10-4-V	1	1
DATE SAMPLED:	ı		2/17/89	•	1	2	/17/89	ı		2/17/89	1	1		2/17/89)	ı
	l Ba	es (eg)	I Cond	c.(ng/m3)+	I Mass (c	ng)	Conc.(ng/m3)+	Bas	s (ng)	1 Conc	. (ng/m3)+) Ba	as (ag)	f Cone	:.(ag/n3)+	1
*******************************													*******	2 22221	********	=1
PARAMETER	•		t		1		1	1		1		ı		1		1
(ag)	1		1		ı		ı	1		1		ı		1		1
Chlorosethane	1		1	10	1 10		i ID	1		1	ED .	1	ED .	1		•
Broscathane	ı		1	ED .			1 20	1 1	M)	1		1	ID	1	10	ı
Vinyl chloride	•		1		1 10		1 10	f 1		ı	10	1	XD	ı		ı
Chloroethane	•	30	1			:	1 110	1 1		1	MD	1	30	ı	ED .	ı
Bethylene chloride	ı		1	M	l ID	١	1 35 0 1	1 1	150	•		1	ED .	1	IID .	1
1,1-Dichloroethene	ı	m	1	m				1 1		t	m	1	m	1	ID	ı
1,1-Dichloroethane	ı		1	ID		1	1 10 1	1 1		1		1		1	10	t
1,2-Dichloroethese (total)	ı		1	ID O		!	i ii) 1	1 1		•	90	1	III)	1	. 10	t
Chloroform	1		ı		10	1	1 110 (•	10	ı	10	1		1
1,2-Dichloroethane	1		1	ID I	110	1				1	ii)	t	100	1	m	ı
1,1,1-Trichloroethane	ì		ŧ			1	1 100	1		ŧ		ı		ı	10	ı
Carbon tetrachloride)		1	ID I) XD	- 1	1 310 1	1	D	ı		ı	10	1	10	1
Brosodichlorosethase	l		1	ID 1	100	1) n d (1		ı	II)	l .		1		1
1,2-Dichloropropane	1		1			1	1 120 1		D .	1	MD .	1	IID	ı	30	•
trans-1,3-Dichloropropens I	1		1	D I	100	(1 100 1		I	ŧ	m	ı	m		m	1
Trichloroethene I	1		1	ID		1	100 1	1	D	ı	JID	1	ID .	•	310	•
Dibrosochlorosethane i	ì	D	t	ID	IID IID	(1 10 0 1		10	l	IID	ı	113	•	ID	1
1,1,2-Trichloroethane	1	ED .	1	10	IID I	1) II D 1		D	l	IID	1	IID	1	m	1

D

MD

m

M

m

m

m

NOTES: ND - Not detected.

TOTAL TARGETED VOLATILE ORGANICS ...
TOTAL HON-TARGETED VOLATILE ORGANICS

Benzene

Brosofore

Toluene

Chlorobenzene

Ethylbenzene

cis-1,3-Dichloropropene
2-Chloroethyl visyl ether

1,1,2,2-Tetrachloroethane Tetrachloroethene D

FOOTROTES: Chain-of-Custody indicated that samples 1-VA thru 4-VB were to be analyzed for VO's, "B" samples are duplicates of the "A" samples.

Since "A" samples were found to have some of the above parameters the duplicate samples ("B" samples) were not analyzed.

^{· -} Calculated based on a sampling flow rate and reported concentration;

refer to Appendix F for supporting documentation.

^{*** -} Total includes compounds detected at trace concentrations (J), excludes compounds found in lab blank (p).

TABLE 28: SUMMARY OF VOLATILE ORGANICS ANALYTICAL TESTING - AIR SAMPLING RESULTS EPA METHOD 624

L.E. CARPENTER, WHARTON, NEW JERSEY.

GeoEngineering, Inc. Bovesber 1989

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SAMPLE ID:	• -	0-1-YA -		Q-2-VA		D-3-VA		0-4-7À	ı
DATE SAMPLED:		/14/89		/14/89	•	/14/89		/14/89	!.
	l Hase (ng)	Come. ng/m3+	f Hass (ng)	I Conc. ng/m3+	Bass (ng)	Conc. ng/m3+	Hass (ng)	(Conc. ng/m3•	!
*********************************		 		2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	*====================================	************	/ W = W # # # # # # # # # # # # # # # # #	e Languagus serenga	
PARAMETER	!	3	:	1	•		•	, 1	:
Chlorosethane	, 1 110	1 10	' ED	1 160	1 100	10	1 110	. 100	i
Brosonethane	: ED	. ED	. 100	i 100	 1 m	. ID		1 10	i
Visyl chloride	i 100	i 10	i 50	i 160	1 110	100	i i ii	1 10	1
Chloroethans	. <u> </u>	ID 1	I IID	1 10	! !!D	110 1	10	1 10	•
Bethylene chloride	i 100	100	I KD	1 10	1 JID 1		100)) ID	1
Acetone	1 10	1 100	1 110	i IID	1 100) 310 (I D	1 PD	t
Carbon disulfide	1 10	1 ID I	i IID	100	1 100) 100	100	t 100	ı
1.1-Dichloroethene	l ID	j m	i ID	1 10	1 20) 20 (ID	1 10	ı
1,1-Dichloroethane	! MD	1 10	1 ED	1 10	i 10 0 (100	I 110	1 100	1
1,2-Dichloroethene (total)	1 10	1 10	1 MD	1 10) 10 0	110	1 110	ı
Chloroform	l 100	1 300		1 10			100	1 10	1
1,2-Dichloroethane	1 ID	; p	I ID	1 10	! !!!	10	· m	! ID	į
2-Butanone	1 10	1 10	1 110	1 10	1. 100	80	1 10	1 10	:
1,1,1-Trichloroethane	1 10	† 1D	1 110	1 10	1 110	10	1 10	! 100	!
Carbon tetrachloride	1 30	1 10	100	1 10	! 10		100	1 10 1 10	:
Vinyl acetate	1 10	1 10	1 10	1 10	1 110	10	, 10	•	:
Brosodichlorouethane	1 10	1 10	100	1 10	j. 100	ID	1 10 1 10	1 10 1 10	:
1,2-Dichloropropana	1 110	1 10	I ID	! ED	1 10 !	100	ענו ו	. 100 1 100	:
cis-1,3-Dichloropropens	1 100	1 10	1 100	! #D	! ID 1			1 10	:
Trichloroethene	1 50	1 10	ID	1 110	! BD (1800 1800	100	· 20	:
Dibrosochlorosethane	1 10	1 150 1 150	לוני ו לוני ו	1 30 1 10	1 110 (1 120 (100	1 10	1 10	ï
1,1,2-Trichloroethane	1 10			1 363.5 p	1 3.8 Jp (432.1 p	8.5 Jp	1 827.5 p	:
Benzene	1 3.2 Jp	l 335.2 p f ED	1 3.2 Jp 1 ED	1 MD	1 100 f	1 1D	10.5 TD	1 ED	:
trans-1,3-Dichloropropens	1 ED 1 ED	1 10	עה ו 1 ID	1 ED	1 10 I	100		. <u> </u>	:
Brosofore	1 100	 I ID	1 10	1 100	1 10	100	ID.		i
4-Bethyl-2-pentanone Tetrachloroethene	1 12D	1 10		1 10	, <u>, , , , , , , , , , , , , , , , , , </u>	100		. <u> </u>	i
	1 ED	1 10	1 10	1 10	1 10 1	ID I	1 10	1 100	i
Toluene Chlorobenzene	1 10	1 10		1 10	. 10	10 I	1 20		i
Ethylbenzene	1 ED	100		1 10	1 100	30	, E		i
-	1 10	. <u> </u>	1 10	1 10	. 100 i	, <u>, , , , , , , , , , , , , , , , , , </u>	, m	 I 10	i
Styrene Tylene (total)	1 100	1 10	. 100 1 100	1 10	1 10 1	100	i 100		i
elvana /megs/	i ~ .		i	i -	;	_	i —	<u> </u>	i
TOTAL TARGETED VOLATILE ORGANICS ***	1 10	i 100	i MD	1 10	i 110 i	100	1 10	i 100	1
•	1	1	1	1	, 1) [i	t	1
TOTAL MON-TARGETED VOLATILE ORGANICS	1 10	1 100	1 100	1 10	I 110	110	10	1 10	ı

NOTES: ND - Not detected.

J - Trace concentrations detected below reporting limit.

p - Compound also found in laboratory blank.
- - Calculated based on sampling flow rate and reported concentration; refer to Appendix F for supporting documentation.

*** - Total includes compounds detected at trace concentrations (J), excludes compounds found in lab blank (p).

FOOTNOTE: Chain-of-Custody indicated that samples 1-VA thru 4-VB were to be analyzed for VO's; the '8' samples are duplicates of the 'A' samples. Since 'A' samples were found to have none of the above parameters the duplicate samples ("B" samples) were not analyzed.

TABLE 28: SUMMARY OF VOLATILE ORGANICS ANALYTICAL TESTING - AIR SAMPLING RESULTS

EPA METHOD 624

L.E. CARPENTER, WHARTON, NEW JERSEY.

GeoEngineering, Inc. Bovember 1989

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SAMPLE ID:	1	AQ-1-VA	-	NO-2-VA		10-3-41		10-4-YA	ı
DATE SAMPLED:	1	4/12/89	1	4/12/89	1	4/12/89	1 4	1 /12/89	ı
		1 Conc. ng/m3+							
***************************************		*** ***********	***********	. 20222222222			} = = = = = = = = = = = = = = = = = = =	. 22022222222	4
PARAMETER	!	1	!	1	!	Ţ	!	1	!
#1	!	! _	! _	!	! _	! !	!	! _	!
Chlorosethane	1 110	1 10	I IID	1 10	1 70	1 BD	100	1 10	!
Broscaethane	1 20	1 10	i ad	t RD I	J 100	1 MD	i ID	1 150	ı
Vinyl chloride	I IID	I RD	I ED	1 10	; ED	1 100	IID IID	1 10	į.
Chloroethane	I MD	i mb	1 100	1 HD	1 MD	I ND	I AD	1 10	ı
Hethylene chloride	i md	I KD	# MD	1 20	100	1 100	i IID	1 110	1
Acetone	į pid	1 RD	i IID	1 ND 1	100	1 110	I MD	I IID	t
Carbon disulfide	1 100	(D)	I MD	1 100	i DD	1 200 1	ND ND	I IID	ı
1,1-Dichloroethene	i iid	CN 1	i iid	f AD	100	I MD I	I MD	I ND	1
1,1-Dichloroethane	I MD	I MD	t AD	I RD I	100	1 100	MD MD	1 ND	1
1,2-Dichloroethene (total)	I MD	I MD	I ED	1 80 1	I RD	1 100	i MD	i id	ı
Chlorofore	i KD	1 RD	I ND	1 10 1	i IID	1 100	#D	I ED	ı
1,2-Dichloroethane	t MD	i ND	I ND	1 100 I	100	I DE	I IID	i ID	!
2-Butanone	I RD	I MD	1 20	1 110 1	i pid	I ND I	IID	I ID	1
1,1,1-Trichloroethane	I MD	i 100	1 20	1 10 1	10	I ND I	IID III	I ED	1
Carbon tetrachloride	I IID	I IID	I ED	1 100 1	ID	I 100 I	Ė	1 10	1
Vinyl acetate	I IID	I ND	1 80	1 110 1	1 10	I 100 (ED ED	1 10	ı
Bronodichloromethane	I ND	I IID	l KD	1 100 1	5 D	I RD (HD HD	1 20	t
1,2-Dichloropropane	I ND	I KD	I IID	1 20 1	10	I RD I	I IID	1 10	ı
cis-1,3-Dichloropropene	I KD	I ND	1 MD	1 RD 1	I ID	1 80 1	i iiD	1 ED (
Trichloroethene	I ND	I MD	I ND	I ED I	I IID	1 110 1	ED ED	1 10	i
Dibrosochlorosethane	ON 1	I MD	l MD	1 70 1	IID IID	I IID I	RD RD	1 300	ĺ
1,1,2-Trichloroethane	1 30	1 ED	I ND	1 10 1	10	I ED I	RD RD	1 200	ı
Benzene	I ND	I MD	1 5.8 p	1 540.6 p 1	3.4 Jp	1 297.9 p 1	HD	I IID I	i
trans-1,3-Dichloropropene	I MD	t MD	I RD	1 10 1	ND	I ND 1	HD	I NO I	i
Brosofors	1 100	I IID	i ND	1 40 1	RD	1 (0)	ND	1 80 1	t
4-Hethyl-2-pentanone	1 50	i MD	I ND	1 10 1	ND	1 200 (ND:	1 100	Ĺ
Tetrachloroethene	I ND	I IID	I RD	i du i	ND N	1 BD 1	ED	1 10 1	ı
Toluene	1 ED	i IID	I HD	1 10 1	KD	I BD 1	ED.	1 HD 1	l
Chlaroberizene	I ND	1 ND	i ND	1 10 1	ED.	i ND i	XD	1 110 1	1
Ethylbenzene	I RD	1 'KD	l ND	I IID I	10	I IED 1	MD	I ID 1	ı
Styrene	I RD	I ED	t KD	1 20 1	IID	i dik i	ND	I IID I	i
Tylene (total)	I RD	I RD	: ND	1 110 t	ED	t ED t	HD	1 10 1	i
-	1	1	i	i .		, i		i i	1
TOTAL TARGETED VOLATILE ORGANICS ***	I IID	I RD	i std	I 110 i	ED	I 110 i	HD	I 1810 i	i
	1	1	1	1 . i		1 1		1	
TOTAL HON-TARGETED VOLATILE ORGANICS	1 MD	I ND	I ND	1 110 i	MD	1 180 i	ND	i 110 i	j

NOTES: ND - Not detected.

FOOTHOTE: Chain-of-Custody indicated that samples 1-VA thru 4-VB were to be analyzed for VO's; the "B" samples are duplicates of the "A" samples. Since "A" samples were found to have none of the above parameters the duplicate samples ("B" samples) were not analyzed.

J - Trace concentrations detected below reporting limit.

p - Compound also found in laboratory blank.

Calculated based on sampling flow rate and reported concentration;

refer to Appendix F for supporting documentation.

^{*** -} Total includes compounds detected at trace concentrations (J), excludes compounds found in lab blank (p).

TABLE 28: SURMARY OF VOLATILE ORGANICS ANALYTICAL TESTING - AIR SAMPLING RESULTS EPA METROD 624
L.E. CARPENTER, WEAPTON, NEW JERSEY.

Geofagineering, Inc.
Hovember 1989
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SAMPLE ID:		Q-1- VA		9-2-VA Front	• -	0-2-VA Back (VB)		Q-3-VA //22/89		80-4-VB 5/23/89	ļ
DATE SAMPLED:		/22/89		/23/89		/23/89					:
******************************	! Bass (og)	Conc. 09/834	Mass (ng)	Conc. mg/m3*	Hass (mg/	Conc. ng/m3*	, was red.	i Conc. ng/as-		Conc. mg/m3*	e i
PARAMETER	.,	1	,	1	1	1	, 1	1		1	i
LTENET IER		•	í		ĭ	i	i		·	i	i
Chlorocethese	i 20	1 BD	100	I 100	1 10	i 110	1 10	1 10	D	i 10	1
Bronomethane	1 30	1 150	10	1 10	I ID	1 10	1 MD	1 100	30	1 10	1
Vinyl chloride	1 10		100		1 10	I ID	1 50	1 110 1		1 10	ı
Chloroethane	1 ID	1 10 1	100		t 100	1 10	1 10	! ID	10	1 10	Ī
Hethylene chloride	1 4.1 p	f 390.2 p	l 2.5 p	1 242.8 p	1 100	1 10	1 10	! <u>100</u> !	2.6 p	1 250.1 p	!
Carbon disulfide	1 10	1 <u>m</u>	100	1 10	1 100	1 10	1 10			1 10	:
1,1-Dichloroethene	1 10	1 10	100	1 10	! 100 : 100	1 310 1 810	1 110 1 110	1 110 (1 110 (1 100 1 100	1 3D 1 3D	-
1,1-Dichloroethane	1 10	! m !	ID	1 10	1 10	1 110	1 10	י גאו ו 1 100 !	10	1 20	•
1,2-Dichloroethene (total)	1 10	1 10		1 100 1 1 110 1	1 190 1 190	1 10		י עוג י 1 בסו	100	i	
Chloroform	i id	1 10 1) 110) 110	י שוג ז ו 100 ו	1 120	1 ED	. 10 I 10	1 100 1	, 20	1 10	i
1,2-Dichloroethane	1 10	1 10 !	1 ED	י עון ו	1 10	1 10	, <u>, , , , , , , , , , , , , , , , , , </u>	1 20		1 20	•
2-Butanone	1 10		1 120 1 120	1 av 1	1 10	1 20	, ED	1 80	10	1 10	i
1,1,1-Trichloroethane	1 10	, av ;	1 10 1 10	, <u>, , , , , , , , , , , , , , , , , , </u>	1 10	1 10	i	1 10	5	1 .10	i
Carbon tetrachloride	1 10		, au ED	10		. E	 			1 10	i
Vinyl acetate Brosodichlorosethane	1 10		10	10	100				10	i 10	i
1,2-Dichloropropane	. ED	i 160 i	100	100	100	i 110	1 110	1 10	10	1 10	i
cis-1,3-Dichloropropese	1 10	100	100	1 110	1 10	1 110	1 10	1 10	20	1 10	
Trichloroethene	, <u>, , , , , , , , , , , , , , , , , , </u>	100	100	1 10	1 10	1 10	1 10	f ED (10	1 10	1
Dibrosochlorosethane	. ID	100	IID	1 110	110	1 110	. ND	l I D i	100	1 10	ı
1,1,2-Trichloroethane	1 10	. 100	ID I	i 10	1 110	1 10	1 100	1 110 1	10	1 10	1
Benzens	I 5.3 p	504.4 p	4.5 p	437.1 p	1 2.5 p	1 242.8 p	l 4.3 p i	I 445.0 p I	4.8 p	I 461.7 p	1
trans-1,3-Dichloropropene	1 30	100 1	10	ı 20 i	I 110	1 10	1 10	1 BD 1	P	1 10	ı
Bronoform	1 20	1 10 (ED I	I 100 1	1 110	1 10		1 110 !	10	1 10	t
4-Methy1-2-pentanone	1 20	I 100 I	MD :	100 1	1 (17)	t ID	i 10 0 i	I 110 I	I	į \$D	1
Tetrachloroethene	1 10	I 100 I	ED !	1 10 1	1 110	i id	1 100	I 100 (m	1 10	ı
Toluene	(11)	1 BD 1	110	i 100 (i id	1 10	1 10 1	1 2 0 j	10	1 ID	ı
Chlorobenzene	1 10 1	! ID !	100	I 100 (I ID	1 10	1 DO 1	i 1 0 j	100	1 10	ı
Ethylbenzene	I ID) (0)	ND I	ו סוג ו	100	1 110	1 110	. 1 10 (10	! ID	1
Styrene	1 10	I 160 I	ED 1		I ID	1 10	1 10	10	D	1 10	ļ
	1 !	! !	!			!	:	! _ !	_	! _	:
TOTAL TARGETED VOLATILE ORGANICS	1 10		100	110	100	t 80	1 10			1 10	1
						1		:		i	ï
NON-TARGETED VOLATILE ORGANICS			1	,		;		,		i	i
		15322.8 1	162	: 15734.3 (1 10	: 100	I 159	, 16455.5 i	161	I 15485.5	i
Acetone Setal Vulsaria	1 161	120 1275519	755	73329.4	י פאַ ו	i 10	1 10	10133.3	101	1 10	i
Total Tylenes	1 10		/33	/ /3347. 4	1 50	1	•	, #2 ! I	33)	;
TOTAL BON-TARGETED VOLATILE ORGANICS	161	15322.8	917	89063.7	110	i 110	159	16455.5	161	15485.5	i

NOTES: ND - Not detected.

p - Compound also found in laboratory blank.

 Calculated based on sampling flow rate and reported mass; refer to Appendix F for supporting documentation.

*** - Total includes compounds detected at trace concentrations (J), excludes compounds found in lab blank (p).

FOOTROTE: Chain-of-Custody indicated that samples 1-VA thru 4-TB were to be analysed for VO's;

the 'B' samples are duplicates of the 'A' samples. Since 'A'
samples were found to have none of the above parameters the duplicate samples ('B' samples)
were not analysed. Although acetome was detected
in 1-VA, 3-VA and 4-VA the 'B' (duplicate) samples were not
analysed because the laboratory believed the occurance of the acetome
was due to field sampling contamination. Acetome was not used during
sampling.

TABLE 28: SUMMARY OF VOLATILE ORGANICS ANALYTICAL TESTING - AIR SAMPLING RESULTS EPA NETHOD 624 L.E. CARPENTER, WHAPTON, MEN JERSEY.

GeoEngineering, Inc. November 1989

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SAMPLE ID:	1	AQ-1-VA		10-2-71	-	D-3-VA	1	AQ-4-VA
DATE SAMPLED:	1	6/19/89		5/19/89		/19/89	ļ	6/19/89
	i Mass ing) Conc. ng/m3+						
*****************************	- ========	*** ***********		. 2022222222		**********		** ***********
PARAMETER	•	!	!	!	! !	l		! !
Chlorosethane	!	!	!	! _	! _ !		!	!
Brososethane	1 10	1 100	1 10	! ID	i in (100		! HD !
Vinyl chloride	1 10	i ID	I ID	. 10	1 110 1	10	1 110	1 10 1
Chloroethune	1 10	1 10	1 10	! 100	1 10 1	IID	1 10	ID
Bethylene chloride	1 110 1 120	t 50 t 10	1 10	1 10	1 10 1	ID	I III)	1 (0)
Acetone	1 20	1 10	1 10	1 20	! IID !	30	ID ID	. 100
Carbon disulfide	1 10	1 20	1 JD 1 BD	1 ED 1 ED	1 10 1	10	ID	! 100 !
1.1-Dichloroethene	1 30	i 10	1 10	1 10 1 10		150 150	1 110 1 110	! #0 !
1,1-Dichloroethane	1 10	1 10	1 10	 ! ED	ו עווי 1 120 ו	100 H	1 MD	1 10 1
1,2-Dichleroethese (total)	1 10	i 100	1 1ED	1 10	ו עוביו 1 20 1		: 100 100	1 (11 1 1 (12 1
Chloroform	1 20	1 10	i in		. ED 1	, MD	עת נ מו ו	1 20 1
1.2-Dichloroethane	i IID	. BD	i iii			100	עוון ו	1 10 1
2-Butanone	1 10	i BD	i 10	i Di	. 150 i	100	, 100 1 . 100	1 10 1
1.1.1-Trichloroethane	I 100	1 10	i 100	i 10	. 100 i	ED:	10	. ED 1
Carbon tetrachloride	I ID	1 10	1 110	1 10	. 100 i	100	10	i m
Vinyl acetate	i ID	I IID	1 110	I I D	 ! 100 i	10	10	i 20 i
Brosodichlorosethane	I IID	I IID	I ID	1 10	1 10 1	100	100	1 100 1
1,2-Dichloropropane	I ID	I IID	l ID	i 10 0 i	i 100 i	IID (ED	1 100 1
cis-1,3-Dichloropropene	I KD	t KD	i id	j po 1) 110 i	IID i	MD	1 100 1
Trichloroethene	f RD	l MD	1 (10)	i 160 () 370 (ND i	#D	1 110 1
Dibromochloromethane	I ID	I ND	i id	1 110 () 100 I	HD i	MD CH	1 8D 1
1,1,2-Trichloroethane	i ID	I ID	I IID	i 110 (1 10 0 1	ED i	10	I 80 I
Benzene	1 12 p	i 1290.0 p	12 p	1284.0 p	14 p i	1434.7 p	12 p	1 1278.1 p 1
trans-1,3-Dichloropropene	t RD	1 10D I	ED	i 10 0 1	i de l	ad die	ND	1 10 1
Brosofers	1 10	1 10) #D	i 100 1	i 110 i	ED (MD	1 100 1
4-Hethyl-2-pentanone	I ID	1 10	MD I		160 I	10 (1	m	1 (0)
Tetrachloroethene	I IID	1 110		! 100 () 300 f	100 I	ND .	1 (2) [
Toluene	I ED	1 80 (1 100 i	1 110 I	110 I	ED.	I ED I
Chlorobensene	i iid	I 100 1) 170	! (X)) IID 1	100 I	KD	1 200 1
Ethylbenzene	I IID	1 100 1		100 1	IID I	MD I	ND .	I ND I
Styrene Tylene (total)	! ID		in !	<u>. 100 i</u>	100 1	MD I	BD	1 100 1
WATCHE / CONTEST	! HD	1 10 1	MD (10 1	ND i	MD I	MD	1 10 1
					- !	_ !		! !
TOTAL TARGETED VOLATILE ORGANICS	! #D	. 100 i		10 I) (O)	IID I	ND.	1 90 1
TOTAL BON-TARGETED VOLATILE ORGANICS	I ID	1 10	110	1D 1	\$TD \$	100 i	m	1 10 1

NOTES: ND - Not detected.

p - Compound also found in laboratory blank.

. - Calculated based on sampling flow rate and reported concentration;

refer to Appendix F for supporting documentation.

*** - Total includes compounds detected at trace concentrations (J), excludes compounds found in lab blank (p).

FOOTBOTE: Chain-of-Custody indicated that samples 1-VA thru 4-VB were to be analyzed for VO's; the "B" samples are duplicates of the "A" samples. Since "A" samples were found to have none of the above parameters the duplicate samples ("B" samples) were not analyzed.

TABLE 28: SUMMARY OF VOLATILE ORGANICS ANALYTICAL TESTING - AIR SAMPLING RESULTS EPA METROD 624

L.E. CARPENTER, WHAPTON, NEW JERSEY.

GeoEngineering, Inc.
Bovenber 1989
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. . . - •

SAMPLE ID:	t	AQ-1-VA		19-2- V A	I 49-3-VA	t	20-4-VA	ı
DATE SAMPLED:	•	7/18/89	•	7/18/89	† 7/18/89	ı	7/18/89	ı
	i Base (ng)	I Conc. mg/m3+			l Hass (ng) Conc. n	g/m3+ Bass (ng) Conc. ng/m3•	1
************************************		5 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	**********	. ***********	********** ********		*****	*!
PARAMETER	!	!	!	!	!!!	!	!	1.
	!	!	! _	!	! _ ! _	! _	! _	!
Chlorosethans	1 110	! 10	1 10	1 10		! 10	1 10 1 10	:
Brosceethane Vinyl chloride	1 110 1 120	1 10	1 110 1 110	1 110		10) 100	1 10	:
•	-	1 10	עת י מו ו	1 10	עון ועון ו 1 120 נו	1 10	1 20	:
Chloroethane	t 100 1 100	1 110	1 ND	1 160		1 10	1 RD	:
Hethylene chloride Acetone	1 MD 1 MD	1 10	1 ED	1 10		1 10	i 100	:
Carbon disulfide	1 20	1 20	1 100	1 20	, 120 , 120 1 120 1 120	1 10	1 10	:
1.1-Dichloroethese		1 10	, 10 1 10	1 10		1 10	1 10	1
1.1-Dichloroethine	1 10	1 10	1 20	i id		i 20	i 100	i
1.2-Dichloroethese (total)	1 10	1 10				i ID	1 10	i
Chlorofore	i 100	i iii	1 10	1 10	: 1 100 i 110	i 100	i 10	i
1.2-Dichloroethane	1 10	1 10	i ID	1 10		1 10	1 150	i
2-Butanone		1 10	1 10	1 10		1 100	i 100	i
1.1.1-Trichloroethane	. ED	1 10	1 10	100		i 100	i ID	i
Carbon tetrachloride	i 100	i 100	1 100	i D	1 10 1 10	i m	1 10	i
Vinyl acetate	1 20	1 10	1 10	1 100	1 10 1 10	I ED	1 10	1
Bromodichloromethane	1 10	1 10	1 100	i IID	1 1D 1 1D	1 ED	1 10	ı
1,2-Dichloropropane	l IID	1 10	l IID	1 100	1 10 1 10	1 10	1 10	1
cis-1,3-Dichloropropene	l IID	1 100	1 10	1 110	. NO 1 NO	1 90	1 10	1
Trichlaroethene	J 100	1 100	1 9D	I ND	1 10 1 10	1 10	1 10	1
Dibrosochlorosethans	ı IID	i 110 i	I ND	1 10	1 100 f 100	1 100	I 100	1
1.1.2-Trichloroethane	80	1 110	I IID	1 10	1 10 1 10	I ND	I IID	1
Benzene	I IID	1 700	I MD	1 MD 1	100 I 100 I	1 10	t IID	1
trans-1,3-Dichloropropene	5 D	1 ED 1	i iii	t MD		1 100	I IID	1
Brosoform	I 100	1 100	TD TD	1 100 i	I 100 I 100	l MD	1 10	1
4-Hethyl-2-pentanone	1 10	1 110	i IID	I 110	I 100 I 100	I 100	! JED	1
Tetrachloroethene	10	t 100 () (10)	1 1D 1	CI, 100 I 100	1 113	1 110	1
Toluene	MD MD	1 110 1	III)	t 110 1		1 110	I 100	i
Chlorobenzene	50	1 10 1	IID IID	1 100 1	D 1 10	I IID	I ND	1
Ethylbenzene	i MD	1 100- (100	! 1D		1 10	1 100	1
Styrene	ID IID	1 10 1	IID .	i IID (100 1 100	ļ 170	1 10	!
Nylene (total)	IID IID	1 110) ID) III)	10 1 10	1 10	1 10	!
	<u>'</u>	!				!	! _	!
TOTAL TARGETED VOLATILE ORGANICS	MD	1 110 1	RD .	1 180 1 1 1		1 10	i 110	!
TOTAL MON-TARGETED VOLATILE ORGANICS	ID	i 110 i	ED:	110	ED 1 110	i 80	i mo	i

NOTES: ND - Not detected.

FOOTBOTE: Chain-of-Custody indicated that samples 1-Vi thru 4-VB were to be analyzed for YO's; the "8" samples are duplicates of the "A" samples. Since "A" samples were found to have none of the above parameters the duplicate samples ("B" samples) were not analyzed.

Calculated based on saspling flow rate and reported concentration; refer to Appendix F for supporting documentation.

TABLE 28: SUMMARY OF VOLATILE ORGANICS ANALYTICAL TESTING - AIR SAMPLING RESULTS EPA METHOD 624
L.E. CAMPENTER, WEARTON, NEW JERSEY.

GeoEngineering, Inc. November 1989

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SAMPLE ID:																Luge	•
DATE SAMPLED:	- !			-1-VA	!			2-VA	•			-3-VA	ı			4-71	1
DATE SENTED!	- !	Wann 4		31/89				11/89	ļ			31/89	ı		0/31	1/89	1
***************************************		mana (mg		Conc. ng/a34		Bass (Bg)	.!	Coac. ng/m34	, !	Bass (ng)	•	Conc. eg/a3	• !	Bass (ng)	1 6	loac. ag/a3+	۱ (
PARAMETER			,			***********		**********	:= =	222223222	***	*********	10 21	*********	# #1	19499944448	is į
FRENCIER	- :		:		!		:		!				!		!		1
Chlorosethene	•	10	i	D	1	ED	:	10	:	-	•	_	!		!		!
Bronceethann	i	10	i	Ē	ï	2D		20	:	1D 1D	:	100 100	:	D	!	<u> </u>	!
Vinyl chloride	i	10	i	10	ï	10	i	100	:	m	:	10	:	10) 12)	:	110	!
Chloroethane	i	ID	ì	ED	i	10	i	10	÷	ID	:	10	- :	10	:	30	:
Bethylene chloride	i	10	i	10	i	m m	i	m	ï	100	·	ID ID	:	10	:	10	:
Acetone	i	ED.	ì	10	i	D	i	 m	i	ED.	i	ID	·	10	i	10	-
Carbon disulfide	1	XD	ı	10	i	I D	i	 ID	i	ID	i	10	:	20	:	10	:
1,1-Dichloroethene		10	i	ED	i		i	ID	i	10	:	m m	:	<u>.</u>	:	10	:
1,1-Dichloroethane	i	D	i	ED	ì	Ď	i	10	i	10	·	20	:	2 0	:	ED	:
1,2-Dichloroethese (total)	i	ED.	i	m m	i	IID	i	1 0	ï	10	•	10	:	ED	:	10	
Chloroform	i	10	i	ED	i	- D	i	10 10	i	10	·	100	:	10	:	10	
1,2-Dichloroethane	1	ED .	i	10	i	<u></u>	i	m D	i	m	i	ID	·	10	'n	ID	:
2-Butanone	1	3 0	ı	ND	i	D	i	10	i	100	i	10	i	.10	ï	10	:
1,1,1-Trichloroethane	ı	ED .	ı	ID	i	10	i	10	i	100	i	10	i	20	i	m	:
Carbon tetrachloride	1	ND	ı	HD.	ı	IID.	ŧ	TD T	i	m	i	100	i	<u> </u>	i	m	i
Vinyl acetate	ŧ	ED	1	. 100	t	HD.	ŧ	ND	i	ED	i	100	i	iD	i	ID.	i
Brosodichlorosethans	1	XD	1	ND	ı	HD	ŧ	MD.	ŧ	ID	i	10	i	ED .	i	ED	i
1,2-Dichloropropane	ŧ	MD	1	HD .	1	ED .	ı	100	1	HD	ŧ	MD	1	10	i	D	i
cis-1,3-Dichloropropens	. !	ED)	1	MD	ŧ	10	t	KD	1	10	ı	RD.	ſ	ID		100	i
Trichloroethene	!	ND .	•	ID	ı	ND .	ı	MD	ı	ID	- 1	MD.	1	ED .	ı	an)	Ĺ
Dibroschlorosethane	1	100	•	ED .	ı	ED.	1	ND.	1	MD .	ı	RD	1	MD	ı	100	1
1,1,2-Trichloroethane	•	ID	!	ND.	1	ED .	ı	#D	1	ND .	ı	ED:	1	ED .	l	MD CM	1
Benzene		20 p	1	1861.8 p	!	27 p	!	2683.7 p	ı	26 p	ı	2650.0 p	1	20 p	t	2038.5 p	1
trans-1,3-Dichloropropene Brosofore	. !	ND	!	ID	1	MD	ı	RD .	ı	MD	1	ED	1	ID	1	3 D	1
	!	II)	!	ND To	!	10	1	MD	1	MD.	ı	ND	1	ID	t	ED .	1
4-Nethyl-2-pentanone Tetrachloroethene	. !	ID	!	ID	!	100	ı	ID	ı	MD	ı	III)	1	1 0	1	ED .	1
Toluene	•	MD.	:	D		ID	!	10	1	ND)	ı	#D	1	10	1	ID	1
Chlorobenzena	•	ED.	:	10	!	10	ı	ND 	ı	ND .	ı	MD	1		ì	10	1
Ethylbenzene		ND TD	:	D	!	ID .	!	MD		80	!	TD	!	30 (1	ND :	1
Styrene	;	ND ND	:	110	!	ND	!	100	!	ID	!	ND	ļ	10 (t	ED	ı
Tylene (total)	1	ID ID	ľ	ED ED	!	ND ND	!	ND ND	!	ND ND	ļ	ND ND	!	<u>m</u> !	!	ID	!
• • • • • • • • • • • • • • • • • • • •	i		i	=+	i	av .	i	NU	:	N.	-	, U		100 j	1	100	I
TOTAL TARGETED VOLATILE ORGANICS ***	i	ED	i	100		RD I	i	100	:	ED	:	ND.	:	100	 	10	!
***************************************	i		i	-		-				-	:	ay	:			TO :	•
TOTAL BON-TARGETED VOLATILE ORGANICS	i	iD i	i	110	i	ID 1	i	I D	ï	BD.	1	ED	! 				!
								-	-		•	er In	•			5 0	

NOTES: ND - Not detected.

FOOTMOTE: Chain-of-Custody indicated that samples 1-Vå thru 4-VB were to be analyzed for VO's;
the "B" samples are duplicates of the "A" samples. Since "A"
samples were found to have none of the above parameters the duplicate samples ("B" samples)
were not analyzed.

p - Compound also found in laboratory blank.

Calculated based on sampling flow rate and reported concentration; refer to appendix F for supporting documentation.

^{*** -} Total includes compounds detected at trace concentrations (J), excludes compounds found in lab blank (p).

TABLE 28: SUMMART OF VOLATILE ORGANICS ANALYTICAL TESTING - AIR SAMPLING RESULTS

EPA METHOD 624

L.E. CARPENTER, WHARTON, NEW JERSEY.

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SAMPLE ID:	ı			-1 -7 2	1		<u>10-2-</u>		•		10-	3-VA	ı		10-	4-VA	1
DATE SAMPLED:	1			18/89	1		9/18/		ı			8/89	1		9/1	8/89	- 1
	1	Hass (ng)	1	Conc. ng/a3+	i Ha	es (ng)	1 Co	mc. ng/m3+	•	Nass (ng)	ı	Conc. mg/m3	• • •	Bass (ng)	1	Conc. ng/m3	je į
***********************		********	as j	**********	2 2222	*******	= ===	*********	= =	*********	:) s	222222222	** **		== =	********	:==[
PARAMETER	. !				!		!		ŀ		1		1		,		- 1
Chlorosethane	:	-	!	-	!	-	!		Ţ	_		_	!	_	!		
Brososethane	- :	訶	:	100	:	ID .	!	110	!	100	!	10	ı	10	!	100	
Vinyl chloride	•	ID ID	•	ID .	:	ID	:	II)	•	IID	!	110	!	ND	1	ED .	
Chloroethane	- 1		- 1	ND		100	!	10	!	10	!	ID	!	ID .		ID.	1
Hethylene chloride		110 110	•	11) 11)	!	ED.	!	ND .	!	ID	!	Ð	!	10	1	ID	- (
Acetone	- 1	1D	:	助	!	ND .	!	ID To	!	100	!	100	ļ	ED .	!	D	- 1
Carbon disulfide	:		:		:	ED		10	!	10	!	2D	!	110		10	
1.1-Dichloroethene	:	10	•	3D	:	D	!	10	!	10	ł	100	!	3D	Ţ	100	ŀ
1,1-Dichloroethane	:	10) 10)		10 10	!	ID ID	!	10	:	ED.		ID	!	ED	•	D	
1.2-Dichloroethene (total)	1	10	1		!		!	10	!	100	!	10	Ţ	ID .	!	II)	
Chloroform	- :		1	MD MD	:	ID D	!	10	i	100	!	100	ļ	110	ı	110	ı
1.2-Dichloroethane	- :	10 10	Ţ	ND ND	!	ID .	!	ID	•	ND	!	10	Ī	3D	1	100	ı
2-Butanone	- !		!		!	ND —	!	ED .		FD	•	ID .	!	ED.	ı	50	ı
1,1,1-Trichloroethane	- :	11D	:	D	:	ED.	:	ND TO	!	ID	1	ED	!	ND 	1	I D	
Carbon tetrachloride	- !	ND ND	!	ND ND	!	ND ND	!	IID	!	10	1	ID .	!	IID	ļ	ID	ı
Vinyl acetate	- :	100	:	ED U	•		:	JID	!	ID .	•	100	!	ID	1	ID	•
Brosodichlorosethane			!		!	HD	!	10	!	ND .	•	XD	1	ED	- 1	ED .	1
1,2-Dichloropropane	- 1	ID ID	:	#D	!	ND ND	!	D .	ŀ	10	!	100	!	ED	!	110	!
cis-1,3-Dichloropropene	•	10	:		!		!	110		100	!	ID	1	和	•	D	•
Trichloroethene	•		!	ND	!	ND	!	100	!	100	ı	110	1	10	ľ	ND:	1
Dibrosochlorosethane	- !	110 110	!	ED	!	HD HD	1	ID .	!	ED .	!	10	•	100	į	MD.	- 1
	•	•	!		!		•	MD	!	10	!	10	1	ND	1	110	ļ
1,1,2-Trichlorosthane	!	ID .	!	RD	1	MD.	1	MD	ı	MD	į	110	ł	MD .	1	MO	ı
Benzene	ı	15 p	1	1562.5 p	1 9	9.9 p	1 1	1028.7 p	ı	22 p	ı	2205.6 p	ı	26 p	1	2555.0 p	- 1
trans-1,3-Dichloropropene	!	IID	1	M	1	ED)	ŧ	ED .	1	MD	ı	#D	ı	ED.	1	ID .	1
Bronoform		IID	ļ	MD.	1	IID	ŧ	MD.	i	IID	ı	ID	1	ND	•	ND	ı
4-Hethyl-2-pentanone	•	110	1	ID	ı	MD	1	TD .	1	50	ı	m	1	ID	1	ND	- 1
Tetrachloroethene	!	ID .	ı	MD.	ı	HD .	ı	ND CIN	ı	ND	ı	MD	L	ED .	1	ID.	1
Toluese	ı	IID	1	MD	ı	ED .	ı	ND	ı	MD .	1	ED	1	ED	ŧ	RD	1
Chlorobensene	1	ND	ı	MD	ŧ	MD .	1	IID)	1	ND CIN	1	团	1	m	1	M	1
Ethylbenzene	1	ED)	ı	舠	ł	MD	ı	10	ı	ND .	1	ID	1	ID .	1	MD	ı
Styrene	1	ND .	ı	MD	1	ND ON	1	MD	ı	100	•	ND	1	ED .	1	IID	1
Nylene (total)	ı	ID	ı	ID .	ı	MD	1	IID	1	RD .	•	100	1	100	1	MD	1
	1		ł		ı		ı		ı		ı		1		1		i
TOTAL TARGETED VOLATILE ORGANICS ***		ED)	1	MD	ı	IID	1	MD	•	MD	ı	20		IID	1	HD.	i
	i	•	i		i		i	~	i		í		i	-		_	
TOTAL HON-YARGETED VOLATILE ORGANICS	i	III)	i	ND	i	MD .		m	:	ID.	:	TD	:	ED	!	ED	Ţ

NOTES: ND - Not detected.

p - Compound also found in laboratory blank.

Calculated based on sampling flow rate and reported concentration; refer to appendix F for supporting documentation.

*** - Total includes compounds detected at trace concentrations (J), excludes compounds found in lab blank (p).

FOOTROTE: Chain-of-Custody indicated that samples 1-VA thru 4-VB were to be analyzed for VO's; the 'B' samples are duplicates of the 'A' samples. Since 'A' samples were found to have none of the above parameters the duplicate samples ('B' samples) were not analyzed.

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SAMPLE ID:	1 40-1-44		1 10-3-47		I AQ-3-VA (1 40-4-94 1		
DATE SAMPLED:	1 10/09/89		1 10/09/89		10/09/69		10/09/89		i
	I Home (ng)	I Conc. mg/m3+	l Mass (ng)	1 Conc. ng/m3+	l Base (ng)	Conc. pg/m3+	Hass (pe)	I Conc. mg/m3+	i
***************************************	• [*** ** *** *** * * * *			.	 				e i
PARAMETER	į.	1	1	1	ı	F :	1	1	i
Chloromethane	1 ID	!	! 	!	!	! _ !	1	1	İ
Proposethana	1 10	i IID I IID	i ID	! #D	j po	! 10 () (10)	1 10	ı
Vinyl chloride	1 10	1 10	, 10 , 10	I ED I ED	! ID	1 10 (100	i in	•
Chloroethane	i m	4 MD	1 10	i KD	1 100 1 110	! IID (110	1 100	1
Mathylene chloride	1 10	1 10	1 10	1 10	עוני י מוא ו	1 10 (10	i ID	!
Acatone	i m	1 100	1 10	1 10	עון ו מו ו	1 10 (IID	1 m	ŀ
Carbon disulfide	i 100	1 10	 I 110	1 20	עון ו מו ו		, AD	1 10	!
1.1-Dichloroethene	i iii	i in	1 10	1 10	10 10		110) 1105	1 10	!
1,1-Dichloroethane	i iii	l RD	ab a	i mo		1 20 1	100	1 2D 1 2D	:
1,2-Dichloroetheme (total)	I IID	1 110	10	1 10	1 100	 I IID I	10	1 10	:
Chlorofore	1 20	l IID	i iib	1 10 1	10		ID ID	1 10	:
1,2-Dichloroethane	I IID	i iio i	IID		10	: 20 i	10	1 10	:
2-Butanone	i IID	I IID I	IID	1 110	10		10	 i 20	:
1,1,1-Trichloroethane	f IID	1 10	10		IID	i 100 i	10	1 20	:
Carbon tetrachloride	I IID	1 10	10	i iii	100		ii)	i 100	i
Vinyl acetate	I RD	1 NO (IID IID	1 10 1	IID	1 110 1	ED	1 10	ì
Brosodichlorosethans	I IID	l 20 (IID III	1 10 1	100	i iib i	113	I 100	i
1,2-Dichloropropane	i #D	E 310 (IID III	1 20 1	IID	1 110 1	ID	1 10	i
cle-1,3-Dichloroprop ene	1 10	1 10 (ED .	i da i	I RD I	1 120 1	100	1 110	i
Trichloroethene	! ID :	! 100	10	1 1Ö-1	ED I	ID 1	10	1 110	i
Dibrosochlorosethane	1 10	1 1 10 1	ID III	1 10 1	ND I	100	m	ı BD	i
1,1,2-Trichloroethane	1 (10)	1 ED (90	1 310 j	ED 1	1 (2)	20	l 100 i	i
Benzene	1 9.3 Jp i	i 991 p i	8.9 p	1 962.2 p 1	8.0 Jp	798.6 p 1	9.6 Jp	f 951.5 p	i
trans-1,3-Dichloropropene	l moi i	l RD i	. ID .	l mori	MD .	10	10	1 110	i
Brosofors	1 ND 1	ו מול ו	IID	i 110 i	II D (100 I	10	1 10	í
4-Hethyl-2-pentanone	1 PD (I 110 1	SD	1 MD 1	IID (m .	1 10	i
Tetrachloroethene	1 MD (i 100 i	ID	i 100 i	ED I	BD 1	IID .	1 110	
Toluene	1 IID	1 (III	3D	1 100 1	ID (IED I	100	I ID 1	
Chlorobenzene) 110 (I ID 1	ED .		10	100	10		
Ethylbenzene	1 10		SD I	100	10	1D 1	ED	ו עם	:
Styrene	100	1 BD 1	I D 1	. ED 1			10		
Tylene (total)	i 170 i	10 i	10	ID I	100	10	10		!
	•	i		i	- i	- :			
TOTAL TARGETED VOLATILE ORGANICS) #D (IID (ND (110 I	110 1	10 1	100 i	1 1 1	
1	l !	i	1			:			
1) i	i	i	i	i	i	1		
BON-TANGETED VOLATILE ORGANICS) <u> </u>		i	i	i	i	i i		
Intagen	37 J	3942.9	10	MD	no i	100 i	100	, and i	
Dimethylester carbonodithiotic acid	1 62 J 1	6607.0	ED (ID I	110 i	100	10	10 I	
) I	1	1	i	i	i			i
TOTAL BON-TARGETED VOLATILE ORGANICS	l 99 ł	10549.42 (MD I	IID 1	110	100 i	100	110	
						•			

NOTES: ND - Not detected.

- p Cospound also found in laboratory blank.
- J Trace concentrations detected below reporting limit.
- · Calculated based on sampling flow rate and reported mass;
- refer to Appendix I for supporting documentation.
- *** Total includes compounds detected at trace concentrations (3), excludes compounds found in lab blank (p).

FOOTBOTE: Chain-of-Custody indicated that samples 1-VA thru 4-VB were to be analyzed for YO's; the '0" samples are duplicates of the '4" samples. Since 'A' samples were found to have mone of the above parameters the duplicate samples ('B' samples) were not analyzed. Sithough suctions was detected in 3-VA, 3-VA and 4-VK the 'E' ideplicate! samples with not provided because the laboratory believed the occuration of the scatone was due to field sampling contamination. Across same and used during sampling.

TABLE 28: SUMMARY OF VOLATILE ORGANICS ANALYTICAL TESTING - AIR SAMPLING RESULTS

EPA METHOD 624
L.E. CARPENTER, WHARTON, NEW JERSEY.

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SAMPLE ID:	1		AV-1-PA	ı		AQ-	2-VA	1		AQ-3-	/A	1		AQ-	4-VA	ı
DATE SAMPLED:	1		11/1/89	1		11/	1/89	ı		11/1/	39	ı		117	1/89	ı
	Mass	(ng)	Conc. ng/m3	* Ma	as (ng) Co	nc. ng/m3	· IH	ass (ng) Conc	. ing/m3	° M:	ıss (ng).[Co	nc. ng/m3	۱ "
000000000000000000000000000000000000000	****	F==#=	F4349000232		20=#45					*****	*****				49 x # # 8 6 1	100
	1		I	ı		1		1		1		ı		ļ		ı
Chloromethane	1 M	-	1 NĎ	1	ND	ı	ND	ļ	ND	ı	ND	1	ND	1	ND	١
Bromomethane	i w	D	l ND	ı	ND	1	ND	ı	ND	ı	ND	ŀ	ND	F	ND	ŧ
Vinyl chloride	i M	D	j ND	t	ND	ı	ND	ŀ	ND	1	ND	1	ND	ı	ND	Į
Chloroethane	I N	D	(ND	1	ND	I	ND	1	ND	1	ND	ı	ND	1	ND	1
Methylene chloride	I N	D	l ND	1	ND	1	ND	1	ND	ı	ND	I	ND	1	ND	
Acetone	i M	D	j ND	1	ND	1	ND	1	ND	1	ND	1	ND	ı	ND	
Carbon disulfide	I M	D	I ND	1	ND	1	MD	ı	ND	1	ND	ı	ND	ı	ND	1
1,1-Dichloroethene) NE	D	l ND	1	ND	1	ND	1	ND	1	ND	1	ND	1	ND	ı
1,1-Dichloroethane	1 10	0	j ND	ŀ	ND	1	ND	ŧ	ND	1	ND	1	ND	ł	ND	١
1,2-Dichloroethene (total)	į NE	0	j ND	1	ND	1	ND	1	ND	1	ND	1	ND	1	ND	-1
Chloroform	j NE	9) ND	ı	ND	1	ND	1	ND	1	ND	ı	ND	1	ND	1
1,2-Dichloroethane	J NE	D	j ND	1	ND	i	NO	i	ND	i	ND	i	ND	i	ND	ì
2-Butanone	į NC)	J ND	i	ND	i	ND	ŧ	ND	ì	ND	i	ND	i	ND	i
1,1,1-Trichloroethane	j NE		ND ND	i	ND	i	ND	i	ND	i	ND	i	ND	i	ND	i
Carbon tetrachloride	j NO	•	ND	i	ND	i	ND	i	ND	i	ND	i	ND	i	ND	i
/inyl acetate	NE)	ND	i	ND	i	ND	į.	ND	i	ND	i	ND	i	ND	i
Bromodichloromethane	I NE)	ND	i	ND	t	ND	Ť	ND	i	ND	i	ND	i	ND	i
l,2-Dichloropropane	j NO)	, ND	i	ND	i	ND	i	ND	i	ND	i	ND:	i	ND	i
cis-1,3-Dichloropropene	1 NO)	ND	i	ND	i	ND	i	ND	i	ND	i	ŃD	i	ND	i
Trichloroethene	i ND)	ND	i	ND	i	ND	i	ND	i	ND	i	ND	i	ND	i
Dibromochloromethane	i ND	ì	ND ND	i	ND	i	ÌΚD	i	ND	i	ND	i	ND	i	ND	i
1,1,2-Trichloroethane	i NO	ì	ND	i	ND	i	ND	i	ND	i	ND	i	ND	i	ND	i
Benzene	1 1.4	Jp i	133.1 p	1.1	.3 Jp	i .	124.6 p	i	ND	•	ND	i	23 p		366.3 p	i
trans-1,3-Dichloropropene	I ND		ND	i	ND	i	ND	i	ND	•	ND	i	ND	: -	ND	
Bromoform	I ND	i	NE3	i	ND	i	ND	i	ND	•	ND:	:	ND	:	ND	1
-Methyl-2-pentanone	L ND	i	ND	i	ND	i	ND	ï	ND	•	ND	:	ND	:	NB	;
etrachloroethene	I ND		ND.	i	ND	i	ND	ï	ND	•	ND	:	ND	:	ND ND	:
oluene	I ND	•	ND:	i	ND	i	ND	:	ND	•	ND	:	ND	1	ND	:
hlorobenzene	ם או	•	ND	i	ND	:	ND	ï	ND	•	ND	:	ND	:	ND	:
thy 1 benzene	I ND	•	ND	:	ND	ï	ND	:	ND	•	ND	:	ND	•	ND ND	:
ityrene	I ND	•	ND	:	ND	i	ND	:	ND	•	ND	!	ND ND	:	ND	!
ylene (total)	l ND	•	ND	•	ND		ND	:	ND	•	ND ND	!				!
OTAL TARGETED VOC ***	i ND	•	ND	•	ND	!	ND	1	ND	•	ND ND	i i	ND ND	!	MD ND	ļ
ON-TARGETED VOC		i	****	1			ND.	!	.40	. '	NU	:	MD		ΨD	!
nknown	i IND		ND	:	ND	:	ND	!	21	I		!	***	ŀ	70010 -	ļ
erbon oxide sulfide	1 ND	,	ND ND	•	NU 1.7	!		!	21		25.9	!	319	•	32818.5	!
OTAL NON-TARGETED VOC	1 PD 1 99	•		•		ļ	4956.7	!	94	•	15.7	1	89	ı	9156.4	ı
IUIAL NUN-TANGETED VOC	99	- 1	10549.42	ı	ND	1	ND	ı	ND	1 4	MD.	1	ND	ţ	ND	

NOTES: ND - Not detected.

p - Compound also found in laboratory blank.

FOOTNOTE: Chain-of-Custody indicated that samples 1-VA thru 4-VB were to be analyzed for VO's; the "8" samples are duplicates of the "A" samples. Since "A"

samples were found to have none of the above parameters the duplicate samples ("B" samples) were not analyzed.

J - Trace concentrations detected below reporting limit.

Calculated based on sampling flow rate and reported mass;
 refer to Appendix F for supporting documentation.

^{*** -} Total includes compounds detected at trace concentrations (3), excludes compounds found in lab blank (p)

TABLE 29

SUMMARY OF PRIORITY POLLUTANT METALS TESTING - AIR SAMPLING RESULTS

TABLE 29: SUMMARY OF PRIORITY POLLUTANT METALS TESTING - AIR SAMPLING RESULTS L.E. CARPENTER, WHARTON, NEW JERSEY.

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SAMPLE ID:	ı		AQ-	•	ı		AQ-	-	ı		AO	-	ı		AQ-		1
	i			A, MB	i		, MA		ŧ	3H	, MA	, MB	Ì	4R,	MA,I	1B	ı
DATE SAMPLED:	i	2/15			i			5/89	ı	2/1	5,1	6/89	ŧ	2/15	,16	/89	1
J J	i	Mass (ug)		Conc. ug/m34	1			Conc. ug/m3+	1	Mass (ug)	1	Conc. ug/m3+	Ì	Mass (ug)	1.0	Conc. ug/m3	4 [
######################################	==:	********	= :	=======================================	=		== :		= :					**********	= =:		==
PARAMETER	i		Ì		1		- 1		1		ı		1		ı		1
	1		i		ı		1		ŧ		ı		ı		ı		ı
	l		1		ı		ı		ı		ı		1		1		1
Antimony	1	ND	ı	ND	1	RD	- 1	MD	1	ND	i	ND	ŧ	ND	1	ND	1
Arsenic	i	ND	1	ND	1	ND	-	ND	1	ND	1	ND	1	ND	1	ND	1
Beryllium	İ	RD	1	ND	t	RD	- 1	ND	ı	ND	1	ND	ŧ	ND	1	ND	ı
Cadeius	1	ND	ı	ND	1	0.3	-1	1.6	1	ND	ı	ND	t	ND	ı	ND	ŧ
Chronium	i	ND	i	RD	ı	1.0	1	5.2	ł	0.4	1	2.1	ı	0.4	1	2.1	1
Copper	l	RD	i	ND	ı	6.5	1	33.8	i	ND	1	ND	1	ND	1	ND	ı
Lead	i	ND	ì	RD	1	6.0	ı	31.2	1	ND	ı	ND	ı	ND	1	ND	t
Hercury	ı	ND	ı	ND	ŧ	ND	- 1	ND	ı	RD	ı	RD	1	ND	1	ND	1
Nickel	i	ND	1	ND	ı	ND	1	ND	ı	ND	ı	ND	ı	ND	1	ND	1
Selenium	ĺ	ND	i	ND	1	ND	ı	ND	1	ND	ı	ND	ŧ	ND	1	ND	1
Silver	İ	ND	Ì	ND	i	ND	1	ND	1	KD	1	ND	ı	ND	1	ND	1
Thallium	l	RD	ı	ND	1	ND	-	ND	ı	ND	ı	ND	1	ND	1	ND	ı
Zinc	ı	1.4	ı	7.3	1	27.0	ı	140.3	ı	1.4	ı	7.3	ı	1.0	ı	5.2	1
	t		ı		-1		1		ı		l		ı		1		1

NOTES: ND - Not detected.

• - Calculated based on sampling flow rate and lab reported mass; refer to Appendix F for supporting documentation.

FOOTNOTE: Chain-of-Custody indicated that samples 1MA thru 4MB were to be tested for all Priority
Pollutant Metals (except mercury); where "B" samples were duplicates of the "A" samples.

Instead of analyzing the "B" samples as duplicates, the "B" samples were used for detection of Arsenic,
Selenium, and Thallium and the "A" samples were analyzed for the remaining Priority Pollutant
Metals (except for mercury). Mercury samples were designated as 1H through 4H.

TABLE 29: SUMMARY OF PRIORITY POLLUTANT METALS TESTING - AIR SAMPLING RESULTS L.E. CARPENTER, WHARTON, NEW JERSEY.

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													•	- O- IO			
SAMPLE ID:	1		AQ	 -	- 1		AQ-	•	1		AQ-	•	ı				
	i	18	, MA	,MB	1	28	, MA,	,MB	1	3H,	MA,	MB	ı	48,	, MA,	, MB	- [
DATE SAMPLED:	i			5/89	ı	3/1	3,19	789	1	3/13	, 15	/89	1	3/13	3,15	5/89	-
	1	Hass (ug)	-	Conc. ug/m3	 •	Mass (ug)		Conc. ug/m3+	t	Hass (ug)	ı	Conc. ug/m3+	ı	Mass (ug)	- 1	Conc. ug/m34	• [
**************	=== =														== =	*********	==
PARAMETER	1		ı		ı		1		ı		1		ı		1		1
	1		1		ı		- 1		ı		1		ı		1		1
	ı		ı		1		1		ı		1		1		ı		1
Antimony	Ī	RD	1	ND	ı	HD	1	ND	ı	ND	1	ND	ı	RD	ı	ND	1
Arsenic	1	RD	ı	ND	1	BD	- 1	ND	ı	0.2	ı	1.0	ı	BD	1	HD	1
Beryllium	1	RD	ı	ND	1	ND	ı	ND	ı	ND	1	ND	ı	ĦD	•	ND	1.
Cadmium	- 1	RD	ı	ND	ı	ND	1	nd	ı	RD	1	ND	ı	0.039 J	ı	0.2	1
Chronium	ı	0.91	ı	4.7	1	0.77	İ	4.0	ı	0.58	ŧ	3.0	F	1.0	1	5.2	-1
Copper	1	0.90	1	4.7	1	0.57	- 1	3.0	ı	0.74	ı	3.9	ı	2.0	i	10.4	1
Lead	- 1	ND	ı	HD	ı	0.25	1	1.3	ı	0.32	i	1.7	1	ND	ı	RD	-
Hercury	- 1	RD	ı	ND	1	ND	1	ND	1	MD	ı	ND	1	ND	ı	RD	1
Rickel	- 1	0.34 J	1	1.8	ı	0.077 J	1	0.4	1	0.085 J	ı	0.4	ı	0.25 J	-	1.3	1
Selenium		ND	ı	ND	1	ND	1	ND	1	ND	1	ND	ı	ND	1	ND	1
Silver	i	ND	i	ND	i	ND	i	ND	ì	0.049	i	0.3	i	RD	1	ND	i
Thallium	i	ND	Ĭ	ND	i	MD	i	ND	i	ND	i	ND	İ	ND N	i	ND	1
Zinc	i	1.2	i	6.3	i	0.66	İ	3.4	ı	1.2	ı	6.3	ı	2.7	ı	14.1	ı
	i		i		i		i		Į	•	ı		i	=	i		ĺ

NOTES: ND - Not detected.

J - Trace concentration below reporting limits.

• - Calculated based on sampling flow rate and lab reported mass; refer to Appendix F for supporting documentation.

FOOTROTE: Chain-of-Custody indicated that samples 1MA thru 4MB were to be tested for all Priority
Pollutant Metals (except mercury), where "B" samples were duplicates of the "A" samples.

Instead of analyzing the "B" samples as duplicates, the "B" samples were used for detection of Arsenic,
Selenium, and Thallium and the "A" samples were analyzed for the remaining Priority Pollutant
Metals (except for mercury). Mercury samples were designated as 1H through 4H. On the chain of
custody two samples were recieved labeled "3H". The laboratory assigned one of the two samples an ID of "4H".

TABLE 29: SUMMARY OF PRIORITY POLLUTANT METALS TESTING - AIR SAMPLING RESULTS L.E. CARPENTER, WHARTON, NEW JERSEY.

3 of 10

SAMPLE ID:	1	AQ-	1		AQ-		ı		AO-		ı		AQ-		ı
	I 1H,	MA, MB	1	2R.	MA, MI	3	ı	3H,		1B	i	. 4H	, MA,		i
DATE SAMPLED:		,11/89	i	4/10	-		i	4/10	-		i			L/89	i
	l Hass (ug)	Conc.ug/m3+	ı			onc.ug/m3+	i	Mass (ug)	•	Conc.ug/m3+	i	Hass (ug)		Conc.ug/m3+	i
01222222222222222222222							: =						== =	************	=1
PARAMETER	1	ì	t		i		i		i		i				1
	1	1	İ		i		i		i		i		i		i
	1	1	ı		1		i		i		i		i		i
Antimony	i ND	I ND	i	ND	ĺ	ND	i	ND	i	ND	i	ND	i	ND	i
Arsenic	1 ND	I ND	1	ND	1	RD	i	ND	i	ND	ì	ND	i	ND	i
Beryllium	i 0.01 J	0.1	1	0.01 J	i	0.1	i	ND	i	, ND	i	ND	i	ND	i
Cadnium	0.062	1 0.3	1	0.078	i	0.4	ì	0.068	i	0.4	i	0.055	i	0.3	i
Chronium	i nd	I RD	i	1.2	i	6.2	ì	0.84	i	4.4	i	ND	i	ND	i
Copper	i RD	I ND	1	3.9	1	20.2	i	ND	i	ND	i	RD.	i	ND	i
Lead	I ND	1 ND	1	:ND	i	ND	i	ND	i	ND	i	ND	i	ND	i
Hercury	1 ND	I ND	İ	ND	i	ND	i	ND	i	ND	i	RD	i	ND	i
Rickel	I 0.091 J	1 0.5	ı	0.58	1	3.0	ı	0.064 J	ı	0.3	i	0.064 J	i	0.3	i
Selenium	I ND	1 RD	ı	ND	1	ND	1	ND	i	RD	i	ND	i	ND	i
Silver	1 0.064 J	1 0.3	ı	0.094 J	1	0.5	1	0.096 J	i	0.5	i	RD	i	ND	i
Thallium	I ND	I ND	ı	MD	1	ND	1	KD	i	HD	i	RD	i	RD	i
Zinc	1 0.38	1 2.0	ı	2.2	i	11.4	1	0.83	i	4.3	i	0.47	i	2.4	:
	1	1	ì		i	3	i		i		i	4.17	i	6.7	;

NOTES: ND - Not detected.

J - Trace concentration below reporting limits.

• - Calculated based on sampling flow rate and lab reported mass; refer to Appendix F for supporting documentation.

FOOTNOTE: Chain-of-Custody indicated that samples IMA thru 4MB were to be tested for all Priority
Pollutant Metals (except mercury), where "B" samples were duplicates of the "A" samples.

Instead of analyzing the "B" samples as duplicates, the "B" samples were used for detection of Arsenic,
Selenium, Thallium, and Lead and the "A" samples were analyzed for the remaining Priority Pollutant
Metals (except for mercury). Mercury samples were designated as IH through 4H.

TABLE 29: SUMMARY OF PRIORITY POLLUTANT METALS TESTING - AIR SAMPLING RESULTS L.E. CARPENTER, WHARTON, NEW JERSEY.

4	οŤ	1	n

ı	ı	Q-		ı		AQ-		ı		ÃQ-	•	ı				1
ı	1H, M/	, MB		1	2H, M	A, MI	3	1	3H,M	A,P	ß.	1	4H, H/	,MB		ļ
1	5/24,2	6/89		1	5/25,	30/8	39	1	5/24,	26/	/89	ı	5/25,3	0/89		1
l Has	ıs (ug)	I Cond	.ug/m3+	1				1	Nass (ug)	1	Conc.ug/m3+	1	Mass (ug)	I Con	c.ug/m3+	1
=====		=====	•			= ==		==	========	= =		==:		====	=======	= 1
ı		1		ı		1		1		ı		1		1		1
ı		1		1		ı		l		1		ı		1		ł
i	ND	i	ND	i	RD	1	ND	ì	ND	ı	ND	l	ND	ı	ND	j
ľ	ND	ı	ND	i	ND	1	ND	F	ND	ı	· ND	ı	ND	1	RD .	ı
1	MD	1	ND	ı	ND	1	ND	ı	ND	1	ND.	I	ND	1	ND	1
ŀ	ND.	ŀ	ND	1	ND	1	ND .	ı	ND	4	HD-	1	-ND	1	RD	1
ı	ND	ı	ND	1	ND	1	ND	1	ND	1	ND	l	ND	1	ND	1
ı	ND	1	ND	1	ND	ı	ND	İ	ND	ı	ND	İ	KD	!	ND	1
t	ND	ı	ND	ı	ND	1	ND	ı	ND	1	ND	ı	ND	t	ND	1
ı	ND	1	ND	1	ND	1	ND	1	ND	1	HD	ŧ	ND	1	MD	ŧ
ı	ND	1	ND	1	ND	1	RD	1	ND	ı	ND	1	ND	1	ND	ı
ł	ND	ı	ND	1	ND	1	ND	ı	ND	t	HD	ı	ND	i	ND	ı
Į	ND	1	ND	ı	ND -	1	KD	1	ND	1	ND	ı	ND	l .	ND	1
1	RD	1	ND	1	ND	1	ND	ı	ND	١	ND	ı	ND	1	ND	1
ı	RD	i	ND	ı	ND	ı	ND	1	ND	ł	ND	ı	ND	ı	ND	1
ı	ND	ı	ND	ı		1	ND	ŧ	ND	1	ND	ı	ND	1	RD	1
ı	ND	1	ND	1	ND	1	ND	1	ND	1	ND		ND	1	ND	1
		18, 8/21, 2 5/24, 2 Hass (ug)			1H,MA,MB	1H,MA,MB	1H,MA,MB		1H,MA,MB	1 1 1 1 3 3 1 3 1 1	1 1 1 3 3 1 3	1 1 1 1 3 3 1 3 1 3 1 1	1H,MA,MB	1	1 1 1 2 1 1 3 3 1 3 1 4 1 1 4 1 1 1 5 5 2 2 2 6 8 9 1 5 2 5 3 5 8 9 1 5 2 5 3 5 8 9 1 5 2 5 3 5 8 9 1 5 5 2 5 3 5 8 9 1 5 2 5 3 5 8 9 1 5 5 2 5 3 5 8 9 1 5 5 2 5 3 5 8 9 1 5 5 2 5 3 5 8 9 1 5 5 2 5 3 5 8 9 1 5 5 2 5 3 5 8 9 1 5 5 2 5 3 5 8 9 1 5 2 5 3 5 8 9 1 5 2 5 3 5 8 9 1 5 2 5 3 5 8 9 1 5 2 5 3 5 8 9 1 5 2 5 3 5 8 9 1 5 2 5 3 5 8 9 1 5 2 5 3 5 8 9 1 5 2 5 3 5 8 9 1 5 2 5 3 5 8 9 1 5 5 2 5 3 8 9 9 1 5 2 2 3 8 9 1 5 2 2 3 8 9 1 5 2 2 3 8 9 1 5 2 2 2 2 2 2 2 3 1 1 1 1 1 1 1 1 1	1 1 1 1 2 1 3 1 3 1 1 1 1 1 1

NOTES: ND - Not Detected.

FOOTNOTE: Chain-of-Custody indicated that samples 1MA thru 4MB were to be tested for all Priority
Pollutant Metals (except mercury), where "B" samples were duplicates of the "A" samples.

Instead of analyzing the "B" samples as duplicates, the "B" samples were used for detection of Arsenic,
Selenium, Thallium, and the "A" samples were analyzed for the remaining Priority Pollutant
Metals (except for mercury). Mercury samples were designated as 1h through 4H.

J - Trace concentration below reporting limits.

 ⁻ Calculated based on sampling flow rate and lab reported mass;
 refer to Appendix F for supporting documentation.

TABLE 29: SUMMARY OF PRIORITY POLLUTANT METALS TESTING - AIR SAMPLING RESULTS L.E. CARPENTER, WHARTON, NEW JERSEY.

e. Controller, america, pra	V LAU													5 of 10			
SAMPLE ID:	1		AQ-		- 1		VO.		ł		VO-		1		WG-		ı
	1	18,8	H, Al	В	ı	2H,	MA,I	MB ·	ı	3H, H	A,t	B	1	4H, P			1
DATE SAMPLED:	i	6/20			- 1	6/2			ı	6/20	/89)	ı	6/20	1/89)	1
	ı	Mass (ug)	1	Conc.ug/m3*	. 1	Hass (ug)	1	Conc.ug/m3+	l	Bass (ug)	ļ	Conc.ug/m3+	1	Mass (ug)	ı	Conc.ug/m3+	ı
2222222222222222222	= ==		= =	222222222	==	==========	== :	=======================================	=		= =	=======================================	: =:		:= :		=
PARAMETER	ı		1		1		ı		1	•	ı		ı		1		1
	1		1		1		ı		l		1		ı		ı		1
	1		ı		1		ı		1		ı		ı		ı		1
Antimony	i	RD	i	ND	1	ND	ı	ND	ı	ND	1	HD	ı	ND	ı	ND	ı
Arsenic	ı	HD	1	ND	1	RD	1	ND	ı	RD	1	ND	ı	ND	t	RD	1
Beryllium	I	ND	1	ND	1	ND	ı	KD	ı	ND	1	ND	1	ND	- 1	ND	1
Cadnium	ı	ND	1	ND	ŧ	ND	ı	MD	ı	ND	1	ND	1	ND	ı	RD	ı
Chronium	1	0.5	ı	2.6	1	0.4	ı	2.1	1	0.4	ı	2.1	1	0.4	ı	2.1	1
Copper	ı	HD	1	HD	ı	RD	ı	ND	I	0.3	ı	1.6	1	ND	1	ND	ı
Lead —	1	ND	ı	ND	- 1	ND	1	HD	1	ND	1	RD	1	1.0	ı	5.2	ı
Mercury	1	ND	1	ND	1	ND	1	ND	ı	ND	ı	KD	ı	ND	1	ND	1
Nickel	1	ND	ŀ	ND	ı	ND	- 1	ND	•	ND	1	ND	1	KD	- 1	ND	ı
Selenium	1	RD	1	ND	- 1	RD	- 1	ND	ı	ND	1	ND	ı	RD	-	RD	ı
Silver	ı	ND	ı	ND	- 1	ND	-1	ND	1	ND	ı	ND	ı	RD	- 1	ND	1
Thallium	ı	RD	1	HD	- 1	ND	- 1	ND	ı	ND	ı	HD	ı	ND	ı	ND	1
Zinc	F	HD	ı	ND	ı	0.5	- 1	2.6	ı	0.5	1	2.6	1	0.5	1	2.6	l
	ı		1		- 1		- 1		ı		1		1		1		ı

NOTES: ND - Not detected.

J - Trace concentration below reporting limits.

Calculated based sampling flow rate and lab reported mass;
 refer to Appendix F fot supporting documentation.

FOOTNOTE: Chain-of-Custody indicated that samples IMA thru 4MB were to be tested for all Priority
Pollutant Metals (except mercury), where "B" samples were duplicates of the "A" samples.

Instead of analyzing the "B" samples as duplicates, the "B" samples were used for detection of Arsenic,
Selenium, Thallium, and the "A" samples were analyzed for the remaining Priority Pollutant
Hetals (except for mercury). Mercury samples were designated as 1H through 4H.

TABLE 29: SUMMARY OF PRIORITY POLLUTANT METALS TESTING - AIR SAMPLING RESULTS L.E. CARPENTER, WHARTON, NEW JERSEY.

6 of 10

SAMPLE ID:	1			Q-		1		AO-	•	ı		AQ-	-	ı		AQ-		ı
	ı		1H, H/	, MB		1	· 2H	, MA, P	IB	ı	3H,	MA,I	MB	1	4H,I	MA, MI	В	1
DATE SAMPLED:	1		7/19,2	0/89)	ı	7/1	9,20/	89	t	7/19	,20	/8 9	ı	7/19	, 20/8	89	1
	1	Hass (onc.ug/m3+	ı	Mass (ug)	- 1	Conc.ug/m3+	1	Mass (ug)	1	Conc.ug/m3+	!	Mass (ug)	- 1 (Conc.ug/m3+	ı
811388228828282 <u>82</u> 2	=== :		_		-			_	-					1==	-	== ==	-	=
PARAMETER	- 1			ı		ı		- 1		1		ı		1		1		1
	i			i		i		- 1		1		ı		1		1		1
	1			ı		i		1		1		ı		1		1		1
Antimony	i	ND	1	İ	ND	i	ND	ı	ND	ı	ND	1	ND	ı	RD	ı	ND	ı
Arsenic	1	ND	1	İ	ND	1	RD	ı	ND	ı	ND	1	ND	!	ND	1	ND	1
Beryllium	i	ND	ł	l	ND	i	ND	1	ND	1	ND	- 1	ND	ı	ND	ı	ND	ı
Cadmium	i	ND		i	ND	i	ND	i	ND	1	ND	i	ND	ì	RD	i	RD	i
Chronium	1	1.0		1	5.2	i	1.3	i	6.8	i	2.0	i	10.4	i	1.0	i	5.2	i
Copper	ì	3.0		i	15.6	i	2.0	ì	10.4	i	ND	i	RD	i	ND	i	HD	i
Lead	i	ND		i	ND	i	ND	i	ND	i	ND	i	ND	i	ND	i	ND	i
Hercury	i	ND		i	ND	1	RD	i	ND	i	ND	1	ND	ì	ND	i	ND	i
Nickel	i	ND		i	ND	i	ND	i	ND	i	ND	i	ND	i	ND	į.	ND	i
Selenium	i	RD			RD	i	MD	i	ND	i	ND	i	RD	i	ND	i	ND	i
Silver	i	ND		i	ND	i	ND	i	ND	i	ND	i	ND	i	ND	i	ND	i
Thallium	i	ND			ND	i	ND	i	ND	i	ND	i	ND	i	ND	i	RD	i
Zinc	i	1.0			5.2	i	RD	i	ND	i	ND	i	ND	i	ND	i	ND	i
MAIN	•	1.0			J. L	i	W	;	110	i	419	÷	410	ŀ	nD	;	nu .	:
	ı					•		•		1				•		ı		

NOTES: ND - Not detected.

- J Trace concentration below reporting limits.
- - Calculated based on sampling flow rate and lab reported mass; refer to Appendix F for supporting documentation.

FOOTNOTE: Chain-of-Custody indicated that samples 1MA thru 4MB were to be tested for all Priority
Pollutant Metals (except mercury), where "B" samples were duplicates of the "A" samples.

Instead of analyzing the "B" samples as duplicates, the "B" samples were used for detection of Arsenic,
Selenium, Thallium, and the "A" samples were analyzed for the remaining Priority Pollutant
Metals (except for mercury). Mercury samples were designated as 1H through 4H.

TABLE 29: SUMMARY OF PRIORITY POLLUTANT METALS TESTING - AIR SAMPLING RESULTS L.E. CARPENTER, WHARTON, NEW JERSEY.

	•	10
•	Ωf	-10

SAMPLE ID:	ı	ı	IQ-		ı		AQ	-	ı		Q-		1		AQ	-	ł
	1	1H, M/	, MB		1	2H,1	MA,	MB	1	3H, MA	, MB		1	4H,	MA,	MB	1
DATE SAMPLED:	1	8/29,3	10/89)	1	8/29	, 30	/89	ı	8/29,3	0/8	9	1	8/29	, 30.	/89	1
	l Hass	(ug)	I Co	nc.ug/=3+	ı	Hass (ug)	ı	Conc.ug/m3+	1	Mass (ug)	1 0	onc.ug/a3+	L	Mass (ug)	1	Conc.ug/m3+	1
222222222222222222222222	=====	=======	===	*********	=1=		==	=========	: =	**********	==	**********	==	::::::::::::	==	***********	=
PARAMETER	ı		ı		ı		- 1		ı		1		ı		1		1
	1		1		1								1		-		
Antisony	l	ND	ı	HD	ı	RD	1	ND	ı	ND	1	MD	ŀ	ND	ı	ND	ı
Arsenic	1	ND	1	HD	ı	RD	1	ND	1	MD	1	ND	ı	ND	1	ND	1
Beryllium	ı	ND	ŧ	ND	ı	ND	ŀ	ND	t	ND	1	ND	1	ND	- 1	ND	ı
Cadeius	l	ND	t	ND	ı	RD	I	ND	L	ND	ı	ND	ı	ND	- 1	RD	1
Chronium	1 0	.6	ľ	3.1	ı	0.5	- 1	2.6	1	ND	1	ND	ť	0.6	1	3.1	ı
Copper	1 5	.6	1	29.2	ı	2.9	1	15.1	ı	2.7	ı	14.0	1	1.6	- 1	8.3	1
Lead	ļ	ND	l	ND	t	ND	-	RD	ı	ND	ı	ND	i	ND	ı	ND	t
Hercury	l	ND	1	ND	ı	ND	1	ND	i	ND	ı	ND	l	RD	- 1	ND	1
Rickel	1	ND	ı	ND	1	ND	ı	ND	ı	ND	l	ND	ı	ND	1	ND	1
Selenium	ı	ND	ı	ND	1	ND	1	ND	ı	ND	1	ND	ı	ND	- 1	RD	1
Silver	I	ND	ı	ND	ı	ND	ı	ND	١	ND	1	ND	ı	ND	1	ND	1
Thallius	ı	ND	ı	ND	1	ND	1	RD	1	ND	1	ND	ı	ND	ı	ND	1
Zinc	1	.1	ı	5.7	1	2.6	1	13.5	ı	ND	ı	RD	ı	0.5	ŧ	2.6	J
1	l		ì		ł		-1		ı		I		1		1		1

NOTES: ND - Not detected.

- J Trace concentration below reporting limits.
- Calculated based on sampling flow rate and lab reported mass;
 refer to Appendix F for supporting documentation.

FOOTNOTE: Chain-of-Custody indicated that samples 1MA thru 4MB were to be tested for all Priority
Pollutant Metals (except mercury), all of the "B" samples were duplicates of the "A" samples.

Instead of analyzing the "B" samples as duplicates, the "B" samples were used for detection of Arsenic,
Selenium, Thallium, and the "A" samples were analyzed for the remaining Priority Pollutant
Metals (except for mercury). Mercury samples were designated as 1H through 4H.

TABLE 29: SUMMARY OF PRIORITY POLLUTANT METALS TESTING - AIR SAMPLING RESULTS L.E. CARPENTER, WHARTON, NEW JERSEY.

8	of	1	U

SAMPLE ID:	ı		AQ.	•	ı		AQ		ı	A	Q-	•	ı		AQ-		1
	1	1B, N	IA,I	MB	ı	2H, M	A,	MB	ı	3H, MA	, M	В	ŧ	4H, M	A,H	В	1
DATE SAMPLED:	ı	9/19,	20.	/89	ı	9/19,	20	/89	1	9/19,2	1/	B9	ı	9/19,	21/	89	1
	1 1	lass (ug)	1	Conc.ug/m3+	ı	Hass (ug)		Conc.ug/m3+	ı	Mass (ug)			ı	Mass (ug)	ı	Conc.ug/m3+	1
	==:	.=======			: :						=:		: :	-	= =		:1
PARAMETER	ı		1		1		1		İ	İ	i		1		1		ı
	t		ı		ŧ		1		ı		ı		1		1		1
	ı		ı		ŧ		ı		ı		t		ı		ı		1
Antisony	l	RD	1	ND	ı	RD	ı	RD	t	ND !	i	ND	1	ND	1	ND	1
Arsenic	ı	ND d	ı	RD	ı	ND d	ı	HD	ı	ND d	ł	ND	ı	ND d	1	ND	ı
Beryllium	ı	HD	1	ND	ı	ND	1	ND	i	ND I	ı	ND	ı	RD	ı	MD	1
Cadnium	ı	ND:	ı	ND	ı	ND	1	ND	ı	ND I	ı	ND	ı	ND	ı	MD	1
Chronium	1	ND	ı	ND	1	RD	ŧ	RD	1	ND 1	ı,	ND	ı	ND	1	ND	ı
Copper	l	ND	1	ND	ı	ND	ı	ND	1	ND I	ı	ND	ı	ND	1	ND	i
Lead	ł	0.076	ı	0.4	ı	0.078	ı	0.4	ı	0.29	1	1.5	ı	0.055	1	0.3	ı
Mercury	1	ND	ı	ND	ı	ND	ı	ND	1	ND I	•	ND	ı	ND	1	RD	ı
Nickel	ı	ND	ı	ND	ı	ND	ı	ND	ı	ND I	ı	ND	ı	ND	1	ND	i
Selenium	t	ND	ı	ND	i	ND	i	ND	i	ND I	ı	ND	i	ND	i	ND	i
Silver	ı	RD	ı	ND	i	ND	i	ND	i	ND I	ı	ND	1	ND	i	HD	i
Thallium	i	AD	ı	ND	1	ND	i	ND	i	ND I	1	ND	i	RD	i	RD	i
Zinc	l	ND	i	ND	i	ND	i	ND	i	ND I	ı	ND	i	ND	i	ND	į
	1		ĺ		ı	22	í	-	i	i	ì		i		i	•••	i
	•		•		-		•		-	•	•		•		•		

NOTES: ND - Not detected.

J - Trace concentration below reporting limit.

d - Arsenic value reported at a 10x dilution.

Calculated based on sampling flow rate and lab reported mass;
 refer to Appendix F for supporting documentation.

FOOTNOTE: Chain-of-Custody indicated that samples 1MA thru 4MB were to be tested for all Priority
Pollutant Metals (except mercury), of the "B" samples were duplicates of the "A" samples.

Instead of analyzing the "B" samples as duplicates, the "B" samples were used for detection of Arsenic,
Selenium, Thallium, and the "A" samples were analyzed for the remaining Priority Pollutant
Metals (except for mercury). Mercury samples were designated as 1H through 4H.

TABLE 29: SUMMARY OF PRIORITY POLLUTANT METALS TESTING - AIR SAMPLING RESULTS L.E. CARPENTER, WHARTON, NEW JERSEY.

GeoEngineering, Inc. November 1989 9 of 10

SAMPLE ID:	ı		A	0-		ı			AQ-		ı		AQ-		ı		AO-	•	1
	i		1H,MA	. ME	1	1		2	2H,MA,M	В	1	3H, M	A,H	В	1	4H,	MA,	MB	1
DATE SAMPLED:	ı		10/10,			i			0/10,11		ı	10/10	,11	/89	1	10/1	0,1	L/89	1
	Ì	Mass			onc.ug/m3+	i	Mass			Conc.ug/m3·	1	Mass (ug)		Conc.ug/m3+	1	Hass (ug)		Conc.ug/m3+	1
22222222222222222222	:= :														= =	E2222222	:== :	=======================================	==
PARAMETER	i			i		ĺ			ı		ı		ı		1		- 1		1
- 11	i			İ		ı			1		i		ı		1		1		1
	i			ı		1					- 1		ı		1		ı		ı
Antimony	i	H	D	i	RD	ı	N	D	i	ND	į	ND -	1	ND	1	ND	1	MD	ı
Arsenic	ı	HD	ď	ı	ND	ı	ND	đ	- 1	ND	- 1	ND d	ı	MD	1	ND d	- 1	MD	ı
Beryllium	1	n	D	ı	ND	ı	K	D	1	ND	1	ND	ı	RD ·	ı	RD	- 1	RD	-
Cadmium	ı	H	D	ı	ND	ı	H	D	- 1	ND	1	ND	1	ND	1	RD	- 1	RD	1
Chromium	1	1.	4	ı	7.3	ı	1.	4	1	7.3	1	1.6	ı	8.4	ŧ	1.5	1	7.8	1
Copper	1	3.	3	t	17.16	ı	4.	4	1	22.92	1	4.9	ı	25.58	1	.3	- 1	1.56	1
Lead	1	•	5	ı	2.60	ŀ	N	D	i	ND	-	ND	ı	ND	ı	ND	ı	ND	1
Hercury	١	N	D	ļ	ND	İ	N	D	- 1	RD	1	HD	ı	ND	ı	ND	- 1	RD	1
Nickel	1	H	D	ı	ND	1	10	D	1	ND	1	ND	ı	ND	ı	ND	ı	ND	1
Selenium	ı	H	D	1	ND	1	N	D	ı	FD	1	ND	ı	ND	ŀ	ND	1	RD	ı
Silver	ı	N	D	ł	ND	ı	N	D	1	ND	1	ND	1	ND	ı	ND	İ	ND	1
Thallium	ł	H	D	ı	ND	1	N	D	- 1	ND	ı	ND	ŧ	ED	1	ND	ı	MD	ı
Zinc	ı	1.	4	1	7.28	ı		7	1	3.65	1	.7	1	3.65	ı	.7	1	3.65	1
	i			ı		١			ı		1		1		ı		- 1		ı

NOTES: ND - Not detected.

J - Trace concentration below reporting limit.

d - Arsenic value reported at a 10x dilution.

• - Calculated based on sampling flow rate and lab reported mass; refer to Appendix F for supporting documentation.

FOOTNOTE: Chain-of-Custody indicated that samples 1MA thru 4MB were to be tested for all Priority
Pollutant Metals (except mercury), of the "B" samples were duplicates of the "A" samples.

Instead of analyzing the "B" samples as duplicates, the "B" samples were used for detection of Arsenic,
Selenium, Thallium, and the "A" samples were analyzed for the remaining Priority Pollutant
Metals (except for mercury). Mercury samples were designated as 1H through 4H.

10 of 10

TABLE 29: SUMMARY OF PRIORITY POLLUTANT METALS TESTING - AIR SAMPLING RESULTS L.E. CARPENTER, WHARTON, NEW JERSEY.

SAMPLE ID:	1	A	Q-1-VA		1	A	Q-	2-VA	1		ΑQ	-3-VA	ı		AQ	-4-V	A	ı
	i	1	H,MA,M	В	i	2	:Н,	MA,MB	1		3H	,MA,MB	1		4 H	,MA,	MB	1
DATE SAMPLED	: i		2/89		i	11/			i	11	/2	/89	ł	1	11/2	/89		1
• • • • • • • • • • • • • • • • • • •	Mass	(ug)	Conc.	ug/m3*	Mass	(ug)	10	Conc.ug/m3	* Mas	s (ug	ı) İ	Conc.ug/m3	• Ma:	3 3 (1	l (gı	Conc	.ug/m3*	1
222282222222		*****		*****	***	*****	- to #	*******				*****	8684	1285		***	322##£C	:=
PARAMETER	1		l		1 .		ı		1		ı		ı		١			1
	1		1		I		ŧ		1		ı		ı		ı			ı
	1		1		1		ı		1		ŀ		ı		i			ı
Antimony	1. 1	ID O	N	סו	Į	ND OI	ŀ	ŅD	I	ND_	f	ND	ı	ND	ļ		ND	ı
Arsenic	1 1	(D	1 8	ID:	1 1	4D	ı	ND	1 .	ND		ND:	1	ND	ı		ND-	ı
Beryllium	1 1	ID O	į N	D	1 1	ND OI	1	ND	1	ND	1	ND	i	ND	- 1		ND	ł
Cadmium	1 1	₩D	1 1	D	1 1	4D	1	ND	1	ND	1	ND	1	ND	- {		ND	ŧ
Chromium	1	1D	1 1	ID	1	ND ON	ı	ND	1	ND	ı	ND	ł	ND	- 1		ND	1
Copper		1D	N	ID		ON	ı	ND	1	ND	١	ND	ı	ND	- 1	1	ND	ı
Lead		ND CI	1 1	ID	1 1	ND	1	ND	1	ND	-1	ND	ı	ND	1	1	ND	ı
Mercury	1 1	4D	j 1	ID	1 1	ND	ı	- ND	ı	ND	ı	ND	ı	ND	[1	ND	l
Nickel	i	ND OF	1 1	ID	1	ND	ı	ND	ı	ND	١	ND	1	ND	(ND	ı
Selenium	i	ND D	1 1	ID	1	D	ı	ND	1	ND	1	ND	ı	ND	- 1	1	ND	1
Silver	i	ND	i N	ID	1 1	ND	ı	ND	1	ND	ı	ND	ı	ND	1	ı	ND	I
Thallium	i	ND		lD OI	Ė	ND	i	ND	ı	ND	1	ND	1	ND)	ND	ı
Zinc	i	ND		(D	i	ND	ì	ND	ł	1	1	5.22	1	ND	1	l	ND	ı

NOTES: ND - Not detected.

- J Trace concentration below reporting limit.
- * Calculated based on sampling flow rate and lab reported mass; refer to Appendix F for supporting documentation.

FOOTNOTE: Chain-of-Custody indicated that samples 1MA thru 4MB were to be tested for all Priority
Pollutant Metals (except mercury), of the "B" samples were duplicates of the "A" samples.

Instead of analyzing the "B" samples as duplicates, the "B" samples were used for detection
of Arsenic, Selenium, Thallium, and the "A" samples were analyzed for the remaining Priority
Pollutant Metals (except for mercury). Mercury samples were designated as 1H through 4H.

TABLE 30

SUMMARY OF GROUNDWATER ELEVATIONS - OCTOBER 13, 1989

TABLE 30: SUMMARY OF GROUNDWATER ELEVATIONS OCTOBER 13, 1989

L.E. CARPENTER, WHARTON, NEW JERSEY.

GeoEngineering Inc. November, 1989

Page 1 of 1

```
|=======|=====|======|
         IDEPTH TO ! WATER !
! WELL # | WATER | ELEVATION!
         | (ft.) | (ft.)+ |
MV-1
         1 14.25 | 624.93
  NW-2
         1 8.40
                  1 625.17
  MY-3
         1 7.60
                  1 624.96
  MW-4
         1 7.20
                  1 625.30
         1 6.20
                  1 626.22
  MV-5
1
  MW-6
         1 7.35
                  1 624.65
1
  MV-7
         1 5.60
                  1 625.08
1
  MM-8
         1 4.80
                  1 623.99
  NV-9
         6.10
                  1 624.08
        1 7.80
                  1 622.16
1 MW-10
| MW-11D | 4.45
                  1 627.97
| NV-11I | 7.45
                  1 625.37
        I PRODUCT I
| MW-11S
| HV-12I | 7.70
                  1 625.36
                  1 625.38
| MW-125 | 7.80
| MW-13I
        1 5.55
                  1 625.11
1 MV-13S 1
           6.20
                  1 623.03
| MW-14D
        - 1
            .65
                  1 627.88
| MY-14I
        1
           3.25
                  1 624.98
        1
           3.70
| NV-145
                  1 624.71
        1 11.00 | 625.66
! MW-15I
        | 11.10
I NV-155
                 1 625.67
| MV-16I | 8.75
                  1 626.21
| MW-165 | 8.15
                  1 626.32
| MV-17D
        1 8.90
                  1 625.96
I MV-17S I 8.80
                  1 625.99
| MW-18D | 3.50
                  1 627.27
| MW-18I | 5.55
                  1 625.49
| MW-185 | 6.00
                  1 625.26
| GEI-11 | 5.20
                  1 625.58
| GEI-2I | 11.25
                 1 626.95
| GEI-2S | 11.25 | 626.42
| GEI-31 | 13.40 | 626.45
| PROD | 9.76 | 625.65 |
```

NOTES: - Depth to water measured from inside pvc or stainless steel casing

- Elevations based on Location and Elevation of Monitor Wells, L.E. Carpenter Proper by Recon, Inc. dated 10/31/89
- * Relative to mean sea level.

TABLE 31 SUMMARY OF GROUNDWATER ELEVATIONS - OCTOBER 24, 1989

Page 1 of 1

========	=======	=======
1	IDEPTH TO	WATER
WELL #	I WATER	IELEVATION
1	(ft.)	(ft.)+
=======	=======	
I NV-1	1 11.52	1 627.66
1 MV-2	1 6.84	1 626.73
1 MY-3	1 7.83	624.73
MV-4	1 5.24	1 627.26
1 MY-5	1 5.10	1 627.32
I MW-6	i 4.79	627.21
I NV-7	1 3.53	1 627.15
	1 2.15	1 626.64
I NA-8		1 627.73
i NV-10		1 624.68
	1 2.39	I 630.03
	1 5.79	627.03
NV-115	I PRODUCT	1
MW-12I	1 5.88	1 627.18
i NV-12S	1 6.3	1 626.88
1 NV-13I	1 4.08	1 626.58
	1 4.80	1 626.43
1 MW-14D	IARTESIAN	! !
		1 626.45
		1 626.02
		1 616.86
		1 627.37
1 MW-16I		1 628.06 1
i MW-16S		I 628.12 I
	1 6.95	1 627.91 l
I MV-175		i 629.19 i
I MY-18D		l 629 .2 7 l
MV-18I		l 626.74 l
i MV-18S		l 626.16 l
		l 626.83 l
I GEI-2I		i 628.95 l
		l 628.27 l
GEI-3I		i 628.65 l
I PROD	7.90	i 627.51 i
=======	=======	=======

NOTES: - Depth to water measured from inside pvc or stainless steel casing

- Elevations based on Location and Elevation of Monitor Wells, L.E. Carpenter Proper by Recon, Inc. dated 10/31/89
- * Relative to mean sea level.

TABLE 32 SUMMARY OF HYDRAULIC CONDUCTIVITY VALUES

1027WG.FM

Page 1 of 1

INTERHEDIATE WELL RESULTS

********	========= ===	********	=========	**********
Well #		Test 2	Δ	Z . 1
, =========	(cm/sec) (cm/sec)	(cm/sec) ((cm/sec) i
NW-121 NW-151 NW-161	1 1.70 x 10 ⁻² 2. 1 2.53 x 10 ⁻² 3. 1 3.32 x 10 ⁻² 4. 3 3.80 x 10 ⁻² 3. 1 1.03 x 10 ⁻³ 1.	40 x 10 ⁻² 25 x 10 ⁻² 40 x 10 ⁻² 10 x 10 ⁻⁵	0.87 x 10 ⁻² 0.93 x 10 ⁻² 0.40 x 10 ⁻² 0.07 x 10 ⁻³	2.97×10^{-2} 3.79×10^{-2} 3.60×10^{-2}
1	। <u>ग</u> ्र	= 2.47 x 1	0 cm/sec 1	İ
1	l s	= 1.52 x 1	O cm/sec	Ţ
======================================	 	; ********	 	

DEEP WELLS

	=========	==========		======================================
Well #	Test 1	Test 2		X. 1
1	(cm/sec)	(cm/sec)	(cm/sec)	(cm/sec)

1		ا _م	ايما	ا و_
MW-11d	4.75 x 10 2	5.09 x 10	0.34 x 10 1	4.92 x 10-3 l
HW-17d	1.54 x 10 ⁻² 1	1 1.54 x 10 ⁻² !	0.00 _1	1.54 x 10 ⁻² 1
1 MW-18d	1.40 x 10 ⁻²	1 1.25 x 10 ⁻² 1	0.15 x 10 ⁻⁶	1.54 x 10 ⁻² 1.33 x 10 ⁻²
1	.1	1	!	1
1	1	!	۱ . ا	i
! .	1	្ត្រី = 1.12 x រ	O cm/sec	i
! (s = 5.54 x 1	lo ⁻³ cm/sec	i
ı t	ļ l		l l	i
=============		**********	*********	

MEAN HYDRAULIC CONDUCTIVITY

NOTES:

△ - Difference, Test 1, Test 2

📆 - Mean Hydraulic Conductivity - Intermediate zone

 \overline{x}_{W} - Hean Hydraulic Conductivity for indicated well.

 $\overline{\mathbf{x}}_{\mathbf{J}}$ - Hean Hydraulic Conductivity - Deep zone

Standard Deviation for

 $\overline{\mathbf{x}}$ - Mean Hydraulic Conductivity for aquifer.

intermediate and deep means.

TABLE 33 SUMMARY OF ASSESSED CRITICAL CONTAMINANTS

Table 33: Summary of Assessed Critical Contaminants LE Carpenter, Wharton, New Jersey

Page 1 of 2

Compound	Metrix	Occurrence/ # Samples	Concentration range
Arochlor 1254	Soil **	7/14	ND-14000 ug/kg
	Sediment	0/1	ND
	Surface Water	0/1	ND
	Groundwater	0/54	ND
Benzo (a) pyrene	Soil **	6/23	ND-27000 ug/kg (Benzo(a)anthracene)
201125 (d) P)20116	Sediment	5/6	ND-14000 ug/kg (Phenanthrene)
	Surface Water	0/6	ND
	Groundwater	0/54	ND
Bis (2-ethylhexyl) phthalate	Soil **	23/23	400-15000000 ug/kg
bis (2-ethyliexyl) philialate	Sediment	6/6	1100-520000 ug/kg
	Surface Water	1/6	ND-7.2 ug/L
	Groundwater	20/54	ND-62000 ug/L
Ethylbenzene	Sail **	0/30	ND
2011/2001120110	Sediment	1/6	ND-17 ug/kg
	Surface Water	1/6	ND-3.5 ug/L
	Groundwater	13/54	ND-26000 ug/L
	Air	0/40	ND
Methylene Chloride	Soil **	25/30	ND-230 ug/kg
Tio city abilio bitabaado	Sediment	5/6	ND-59 ug/kg
	Surface Water	3/6	ND-3.8 ug/L
	Groundwater	16/54	ND-8800 (B) ug/L
	Air	0/40	ND
Xylene	Soil **	2/30	ND-19 ug/kg
,	Sediment	1/6	ND-220 ug/kg
	Surface Water	1/6	ND-44 ug/L
	Groundwater	17/54	ND-120000 ug/L
	Air	0/40	ND

NOTES: * - Totals exclude compounds detected in laboratory method blank, (p), and include compounds detected at trace concentrations (J) and (B).

** - Soil concentrations and occurrences represent surficial samples only.

Table 33: Summary of Assessed Critical Contaminants LE Carpenter, Wharton, New Jersey

Pa	۵e	2	of	2

Compound	Matrix	Occurrence/ * # Samples	Concentration Range
Cadmium	Soil **	11/21	ND-49.6 mg/kg
	Sediment	4/6	ND-5.0 mg/kg
	Surface Water	1/6	ND-22.2 ug/L
	Groundwater	0/54	ND
	Air	6/40	ND-1.6 ug/m3
Chromium	Soil **	21/21	6.7-493 mg/kg
CI IL GULLCIII	Sediment	6/6	9.9-34.7 mg/kg
•	Surface Water	2/6	ND-231 ug/L
	Groundwater	4/54	ND-94.5 ug/L
	Air	24/40	ND-10.4 ug/m3
	VII	24/40	ND-10.4 dg/m3
Lead	Soil **	2/21	3.9-6530 mg/kg
	Sediment	6/6	65.4-655 mg/kg
	Surface Water	5/6	ND-1340 ug/L
	Groundwater	2/54	8.3 ug/L
	Air	8/40	ND-31.2 ug/m3
Mercury	Soil **	12/21	ND-3.4 mg/kg
	Sediment	2/6	ND21 mg/kg
	Surface Water	1/6	ND-2.8 ug/L
	Groundwater	0/54	ND
	Air	0/40	D

NOTES: * - Totals exclude compounds detected in laboratory method blank, (p), and include compounds detected at trace concentrations (J) and (B).

** - Soil concentrations and occurrences represent surficial samples only.

ADDENDUM TO APPENDIX E
DATA QUALITY SUMMARY

ADDENDUM TO APPENDIX E DATA QUALITY SUMMARY

The laboratory analyses for the L.E. Carpenter Remedial Investigation were performed by Enseco Erco Laboratory of Cambridge, Massachusetts. The NJDEP Quality Assurance Sections (QAS) summarized their comments on the RI data quality in a Data Validation Review memorandum dated April 26, 1990. Each of these comments have been addressed in Enseco's response dated May 29, 1990. This response also included all additional support data requested by QAS.

The data tables in the revised RI report incorporate the data qualifications as acknowledged by Enseco in the form of footnotes denoting data qualifiers such as excessive hold times, surrogate recoveries outside NJDEP Tier I control limits, and blank contamination. These data qualifiers may render some of the data points unusable, but overall the site has a more than adequate analytical database to characterize the extent of contamination.

Sample Hold Times

Samples with laboratory extraction and analytical holding times in excess of NJDEP Tier I guidelines are flagged in the data tables and are listed by type in Table E-1. Much of the critical analytical data from the RI can be compared to data from the second

TABLE E-1

EXCESSIVE SAMPLE HOLD TIMES

SAMPLE TYPE	VOLATILES	SEMIVOLATILES
Test Pits	3B, 25, 48, 63, 64, 65, 66 67, 71 and 75	2A, 2B, 5A, 5B, 6A, 6B, 7A 7B, 8A, 8B, 50A, 50B, 51B 52, 53, 54, 72, 73, and Field Blanks for 3/23/89, 3/29/89, 4/7/89, and 4/10/89
Hand Auger	1 and Field Blank for 3/28/89	None
Monitor Wells	3, lli, 13s and Field Blank for 9/20/89	MW-1
Surface Water	1, 2, 3, 4, 5 and 6	None
Sediments	None	None

full round of groundwater sampling completed in January 1990 or to the data from the planned supplemental RI sampling which is to include river and drainage ditch water samples and additional soil samples near TP-2, TP-3, and TP-50.

It should also be noted that holding times for priority pollutant metals could not be checked because the laboratory did not report analysis dates. However, since the holding time for metals is six months and the results, were received within six months, no holding times are believed to have been exceeded.

Xylene Analysis

The samples collected during the early portion of the Remedial Investigation were not analyzed for Xylenes as a target compound. These include volatile organics analysis for test pits 1-33, all Hand Auger samples, surface water, and stream sediments samples. All groundwater samples, and test pits 39-79 included xylene as a targeted analyte. Xylene present in earlier samples was still detected but reported as a tentatively identified (non-targeted) compound which are quantitated by the laboratory differently than targeted compounds. Data tables in the revised Remedial Investigation report have included xylene in list of volatile organics and in the sum of targeted volatile compounds.

Surrogate Recovery

The QAS Data Validation Review memorandum also raised the issue of low surrogate recoveries in base/neutral analyses of soil. Specifically, QAS noted low surrogate recoveries for samples TP-7B, TP-28, TP-63, and HA-2. Because of the elevated levels of bis (2-Ethylhexyl)-phthalate in these samples, the loss of surrogate recovery information is an unavoidable consequence of sample dilution.